



The Rules

Energy and Water for Offices

Version 2.0 — September 2026

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Published by
Energy Efficiency and Conservation Authority (EECA)
Level 8, 44 The Terrace, Wellington 6011
PO Box 388, Wellington 6140

T: 09 379 3996

Email: nabersnz@nzgbc.org.nz

Website: www.nabersnz.govt.nz

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Contents

1	Introduction	5
1.1	General	5
1.2	Interpretation of the Rules and Rulings	6
1.3	How to use this document	7
1.4	Situations not covered by the Rules	7
1.5	What is new in this version	7
1.6	Related documents	8
2	Terms and definitions	9
3	Key concepts and procedures	17
3.1	General	17
3.2	Eligibility criteria	17
3.3	Rating period	19
3.4	Standards for acceptable data and estimates	19
3.5	Site visits	21
3.6	Documentation and record-keeping	23
3.7	Alternative methodologies	24
4	Rated area	25
4.1	General	25
4.2	Process overview	25
4.3	Determining office Net Lettable Area	26
4.4	Dividing the office Net Lettable Area into functional spaces	27
4.5	Excluding functional spaces	29
4.6	Medical or educational office facilities and public access spaces	39
4.7	Determining occupancy	45
5	Rated hours	47
5.1	General	47
5.2	Process overview	47
5.3	Determining rated hours	48
5.4	Verifying long hours	57
5.5	Entering Core Hours that vary	59
6	Counting computers	62

6.1	General	62
6.2	Process overview	62
6.3	Counting computers	62
7	Minimum energy and water coverage	69
7.1	General	69
7.2	Minimum energy coverage	69
7.3	Energy end uses requiring additional consideration	71
7.4	Minimum water coverage	79
8	Documentation required for accredited ratings	82
8.1	General	82
8.2	Documentation required for Chapter 4: Rated area	83
8.3	Documentation required for Chapter 5: Rated hours	89
8.4	Documentation required for Chapter 6: Counting computers	93
8.5	Documentation required for Chapter 7: Minimum energy and water coverage	94
	Appendix A Tenant Occupant Survey	98
	Appendix B Calculations	100
B.1	Rated area calculation	100
B.2	Tenancy and Whole Building rated hours calculation	100
B.3	Base Building rated hours calculation	101
B.4	Sampling uncertainty for estimated computer counts	102
B.5	Accuracy calculations procedure	103
	Appendix C Rating period	104
C.1	Allowance for submission	104
C.2	Allowance for responses	105
	Appendix D List of changes	107

1 Introduction

1.1 General

1.1.1 About NABERSNZ

The National Australian Built Environment Rating System New Zealand (NABERSNZ) is a performance-based rating system managed by the **Administrator**.

NABERSNZ ratings are expressed as a number of stars, as follows:

NABERSNZ rating	Performance comparison
6 stars ★★★★★★	Market leading building performance
5 stars ★★★★★	Excellent building performance
4 stars ★★★★	Good building performance
3 stars ★★★	Market average building performance
2 stars ★★	Below average building performance
1 star ★	Making a start
0 stars	Assessed

An accredited NABERSNZ energy or water rating is awarded when the **Administrator** certifies a rating completed by an **Assessor**. The **Administrator** may independently audit the rating and assist in resolving complex technical issues.

1.1.2 About this document

This document contains **Rules** for **Assessors** conducting an energy and/or water rating for office buildings and office tenancies and provides the framework for assessing offices as follows:

- Calculating the **rated area**, see Chapter 4.
- Calculating the **rated hours**, see Chapter 5.
- Conducting the computer count, see Chapter 6.
- Minimum energy and water coverage, see Chapter 7.
- Documentation requirements for accredited ratings, see Chapter 8.

For the purpose of a NABERSNZ rating, 'offices' are understood as being commercial buildings whose primary use is for administrative, clerical, professional and similar information-based activities.

These **Rules** will supersede *NABERSNZ The Rules – Energy and Water for Offices, v1.2, March 2021*.

1.1.3 Scope for NABERSNZ Energy for Offices ratings

Under the NABERSNZ rating system, the number of stars awarded to an office is calculated by benchmarking energy consumption and comparing it against buildings of the same category, using 12 months of actual data. Key factors that influence this consumption, such as building area, hours of use, climate, equipment density, etc., are taken into account depending on the **rating scope**.

The **rating scope** is determined as per Table 1.1.3:

Table 1.1.3: Scopes for NABERSNZ Energy for Offices ratings

Type of rating	Scope
Base Building rating	Assessment of the energy consumed in supplying building central services to office Net Lettable Area (NLA) and common spaces.
Tenancy rating	Assessment of the energy consumed by the Tenancy to be rated. A Tenancy rating typically covers lighting and power within the Tenancy, as well as any special tenant requirements or supplementary air conditioning equipment . A Tenancy rating does not cover Base Building central services.
Whole Building rating	Assessment of the energy used by office Tenancies and by Base Building services to office lettable and common spaces.

1.1.4 Scope for NABERSNZ Water for Offices ratings

Under the NABERSNZ rating system, stars for water consumption are awarded in the same manner as energy consumption. Water usage in the **rated premises** is compared to other buildings of the same category, over a 12-month period. The **rating scope** for Water for Offices ratings is Whole Building. It includes all water used for offices within the building.

Water for Offices ratings can be conducted at the same time as NABERSNZ Energy for Offices Base Building or Whole Building ratings.

1.2 Interpretation of the Rules and Rulings

These **Rules** are to be read in conjunction with the respective NABERSNZ **Rulings** as they apply to the specific building type. **Rulings** are used to address specific issues that may arise after the publication of the **Rules**.

Note: **Rules** texts are amended as required by additional **Rulings** which are published on the NABERSNZ website at www.nabersnz.govt.nz.

Where a conflict between these **Rules** and existing **Rulings** is present, the requirements of the **Rulings** take precedence over the **Rules**.

1.3 How to use this document

The term '**Rules**' refers to a body of works produced by NABERSNZ that specify what needs to be examined, tested and documented when an **Assessor** conducts a rating. Wherever the term is used in this document from Chapter 3 onwards, it refers to this document, *NABERSNZ The Rules — Energy and Water for Offices*. Other **Rules** documents mentioned in the text are distinguished from the present document by the inclusion of their title.

Text appearing **teal** and **bold** is a defined term. Defined terms can be found in Chapter 2 of these **Rules** or in the terms and definitions chapter of the respective **Rules** document.

The following formatting conventions may appear in this text:

 Important requirements and/or instructions are highlighted by an information callout box.

Note: Text appearing with a grey background is explanatory text only and is not to be read as part of the **Rules**.

Example: Text appearing with a green background is intended to demonstrate a worked example of the respective **Rules** section or **Ruling** section.

 This is a documentation requirement callout box

1.4 Situations not covered by the Rules

Assessors need to comply with these **Rules** unless prior approval has been sought and approved by the **Administrator**.

Where appropriate, **Assessors** may contact the **Administrator** to propose an alternative methodology, outlining the circumstances and rationale. Prior approval for use is required and may be granted conditionally, on a case-by-case basis and at the **Administrator's** discretion.

Procedures not contained within these **Rules** may only be used for a particular rating with prior written approval from the **Administrator**. Approval to use the same procedure needs to be sought from the **Administrator** each time it is proposed to be used. Approval is entirely at the discretion of the **Administrator**. All written correspondence is required as evidence and should be collected prior to lodging the rating.

1.5 What is new in this version

This version incorporates the necessary changes to ensure the New Zealand Rules remain up to date with the Australian Rules.

Most of these changes are minor.

A detailed list of all changes made between this version and the previous version is given in Appendix D.

These Rules will supersede *NABERSNZ The Rules – Energy and Water for Offices*, v1.2, 2021.

1.6 Related documents

The following documents have been referenced within these **Rules**:

- a) *NABERSNZ The Rules – Metering and Consumption*, v1.0, September 2026.
- b) *NABERS The Rules – Thermal Energy Systems*, v1.0, August 2021.
- c) *NABERS Ruling – Shared Services and Facilities*, v1.0, March 2022.
- d) *NABERS Ruling – Treatment of Cogeneration and Trigeneration Systems*, v1.2, May 2022.
- e) *Building Owners and Managers Association (BOMA), Method of Measurement*, 1989 or 2017.
- f) *Building Owners and Managers Association (BOMA), Method of Measurement (Net Rentable Area)*, 1985 or 2017.
- g) *Property Council New Zealand (PCNZ), Guide for the Measurement of Rentable Areas*, current version.
- h) *New Zealand Building Code, Clause D1 – Access Routes, Amendment 6*, 2017

Assessors must use the latest version of NABERSNZ Rules and **Rulings** that have been referenced within this document.

2 Terms and definitions

This chapter lists the key terms, and their definitions, that are integral to the proper use of this document.

Term	Definition
acceptable data	Data which meets the applicable accuracy and validity requirements of these Rules .
acceptable estimate	The values derived from an estimation method permitted by these Rules in place of incomplete or uncertain data. Estimates that do not satisfy the above specifications are deemed unacceptable and cannot be used in the rating.
Administrator	The body responsible for administering NABERSNZ, in particular, the following areas: a) Establishing and maintaining the standards and procedures to be followed in all aspects of the operation of the system. b) Determining issues that arise during the operation of the system and the making of ratings. c) Accrediting Assessors and awarding accredited ratings in accordance with NABERSNZ standards and procedures. The functions of the Administrator are undertaken by the New Zealand Green Building Council.
Assessor	An accredited person authorised by the Administrator to conduct NABERSNZ ratings.
Auditor	A person employed by or contracted to the Administrator to perform audits of NABERSNZ rating applications.
comfortable for office work	Where the conditions in a space, in terms of temperature and outside air supply, are suitable for reasonable, normal use as an office.

Term	Definition
complete Tenancy	The NLA occupied by a single tenant. This includes all office spaces and office support facilities in the building that are used together as an interrelated group of facilities to accommodate the tenant's business, no matter if they are on one or more floors and regardless of whether— a) the spaces are occupied on the basis of one or more leases or other agreements; and b) those leases or agreements are nominally held by one or more associated entities on behalf of the tenant. Facilities are not included in such an interrelated group if they are— 1) physically distinct; 2) managed independently; 3) presented or branded distinctly; and 4) independent of one another for services. For leases with one or more sub-leases, it is acceptable to either— i) consider the entire NLA under the head lease with the main tenant as a complete Tenancy; or ii) for the sub-lease(s), separate and consider the NLA of the sub-lease(s) as individual complete tenancies, if sub-metering allows. Note: For information on treatment of government tenancies, see Section 4.3.1.3.
computer server room	A room designed to accommodate computer and associated communications equipment that is separated from adjacent spaces by full-height walls and a door.
data centre	A computer server room that comprises: a) at least 5 % of the total office NLA of the rated building; or b) at least 25 % of the NLA of the floor on which it is located; or c) a room where at least 75 % of its capacity is dedicated to external users.

Term	Definition
	The combination of multiple computer server rooms is not considered a data centre .
direct HVAC energy	All energy associated with the provision of an HVAC service to the functional space with the exception of energy use associated with the operation of a tenant condenser water loop providing heat rejection for a supplementary air conditioning equipment. Note: A 'tenant condenser water loop' is sometimes referred to as a 'supplementary condenser water loop'.
educational office facility	An educational facility which occupies a Tenancy within a commercial office building that is fit for office use and is serviced by the Base Building's direct HVAC energy. Note: For more information, see Section 4.6.
embedded network	A private electricity network that is connected to the parent electricity network or 'grid'.
end use	A purpose or activity (or a group of related purposes and activities) that water or energy is used for.
exclusively for the use of office tenants	Public access is not generally allowed by the office owner or leaseholder, except for receiving visitors to the office.
external user	User of an IT or communication service provided from a facility sited in the rated premises, who is not an occupant of the rated premises. Note: An occupant who uses the service internally from the rated premises and who may also access the network or system remotely (such as from home or another work location) is not an external user.
fit for office use	Fit for continuous occupation as an office, with adequate lighting and with suitable ventilation (such as air conditioning, natural ventilation or mixed-mode operation) of a similar or higher standard of service to the bulk of the office.
fitout works	A construction activity undertaken to install, remodel, replace or remove an office fitout.

Term	Definition
functional space	A space identified by an Assessor as a distinct space in accordance with Section 4.4.
measurement standard for rated area	The standard used for determining the Net Lettable Area (NLA) of a rated premises, as set out in— a) Property Council New Zealand (PCNZ), Guide for the Measurement of Rentable Areas, current version; b) Building Owners and Managers Association (BOMA), Method of Measurement, 1989 or 2017; or c) Building Owners and Managers Association (BOMA), Method of Measurement (Net Rentable Area), 1985 or 2017.
meeting room	A room designed to accommodate meetings for short periods of time on a temporary basis, as opposed to a permanent working area. A meeting room is separated from adjacent spaces by full-height walls and a door.
medical office facility	A doctor's surgery or other facility operated by a health professional (e.g. physiotherapist) that occupies a Tenancy within a commercial office building that is fit for office use and is serviced by the Base Building's direct HVAC energy. Note: For more information, see Section 4.6.
metering system	A system of one or more devices providing an individual measurement. Note: For further information, refer to <i>NABERSNZ The Rules – Metering and Consumption</i>.
NABERSNZ rating input form	The rating input form provided by NABERSNZ for use by Assessors in the calculation of accredited ratings. For NABERSNZ ratings for Offices, this is the online platform, NABERSNZ Portal.
Net Lettable Area (NLA) (also known as rentable area)	The floor area, determined in accordance with the measurement standard for rated area , of spaces that can be used as offices within the rated premises .

Term	Definition
	Note: This is essentially the space within the permanent walls of the building, but excluding spaces for: a) Public access and use (including stairs, escalators, lift lobbies and passageways). b) Building mechanical, air conditioning, electrical and other utility services. c) Staff and cleaning facilities (including toilets, tea rooms, and cleaners' cupboards). The Assessor should refer to the relevant measurement standard for rated area documents for a definitive list of inclusions and exclusions.
occupied	A space within the NLA of a building that— a) for Base Building ratings – is ready for occupation; b) for Tenancy ratings – is ready for occupation and being actively used as an office, including use as an office support facility; and c) for Whole Building ratings – is ready for occupation and either being actively used as an office (this includes use as an office support facility) or undergoing fitout works.
office	A workplace primarily used for administrative, clerical and similar information-based activities, including the associated office support facilities. Note: For reasons of readability, this term is not highlighted throughout this document.
office support facility	A facility which— a) is an adjunct to an office used primarily to provide supporting facilities or services to the office or its occupants; b) is exclusively for the use of office tenants; and c) occupies a space which is fit for office use.

Term	Definition
	This includes facilities for reception, meetings, training, filing and storage, IT and other office equipment, tenant-installed kitchenettes and staff amenities. It can also include childcare, refreshment, recreation, and exercise facilities, as long as they are only available for use by office tenants in the rated premises.
Owner/Tenant Agreement (OTA)	An OTA refers to a document that— a) is a mutual agreement between the user of a functional space and the provider of the servicing to the space. Examples of this include: 1) The landlord and a tenant representative with adequate authority. 2) An owner-occupier and a facility manager. 3) Government property manager and government tenant. b) clearly defines the space and the period of time for which the agreement is made; and c) defines hours of use for the space considered (OTA Hours). The OTA could be the lease agreement or any other written correspondence between the tenant and owner as long as the conditions above are met. Note: Where an Assessor is unsure if a document meets the requirements of the definition of an OTA, advice from the Administrator should be sought.
potential error	The total of all acceptable estimates (including assumptions, approximations, and unverified data) included in the rating assessment. The NABERSNZ rating input form automatically calculates the potential error based on the data provided.
public access space	A space that members of the public have access to. Note: For example, lobbies, foyers, waiting rooms or reception areas. This does not include areas where members of the public need authorised access, e.g. by appointment, with accompaniment or via secure access measures.

Term	Definition
rated area (for an entire rating)	The final area determined by following the process described in these Rules .
rated hours (for a functional space)	For each functional space , the total number of hours per week determined by using one or a combination of the methods described in these Rules .
rated hours (for an entire rating)	For an entire rating, the area-weighted average of the rated hours for all functional spaces included in the rating.
rated premises	The building or building section to be rated.
rating period	The 12-month base period for the rating, requiring at least 12 continuous months of acceptable data upon which the rating is based.
rating scope	The scope of the rating – either Base Building, Whole Building or Tenancy (see Table 1.1.3).
rating type	Type of rating – such as energy or water.
ready for occupation	A space within the NLA of a building when a person or organisation— a) is entitled to exclusive use of the space (e.g. through ownership or a lease or other agreement); and b) requires normal Base Building services, such as access, air conditioning, lighting and power to be provided to the space. Note: An active lease is sufficient evidence for both of these requirements.
Rules	Authoritative document produced by the Administrator that specifies what must be covered by an Assessor in order to produce a rating.
Ruling	An authoritative decision by the Administrator which acts as an addition or amendment to the Rules .
special tenant requirement	An unusual usage of office space or office support facility (e.g., a ‘trading floor’ within an office), resulting in an increased consumption of one or more services or a requirement for additional services to achieve comfort conditions.

Term	Definition
supplementary air conditioning equipment	Equipment that supplements the typical capacity provided by the Base Building air conditioning system.
Tenant Occupancy Survey (TOS)	A survey of employees with knowledge of the functional spaces in the rated premises, conducted in accordance with these Rules. Note: For more information, see Section 5.3.4.
utility	An organisation or company that holds a licence to retail electricity, gas or water, and that sells energy or water as its primary business. This definition excludes the following: a) Landlords which on-sell electricity or water where they neither hold a licence nor have an exemption deemed valid by the Administrator for needing a licence. b) Third party contractors, such as meter reading providers.
validity period	The post-certification period during which the rating is valid for up to 12 months. Note: See Appendix C for further details.

3 Key concepts and procedures

3.1 General

As part of a NABERSNZ rating system, **Rules** provide requirements within the specific rating tools. These **Rules** apply to any building type eligible for a NABERSNZ rating using the NABERSNZ energy rating tools.

3.2 Eligibility criteria

3.2.1 Base Building and Whole Building ratings

A building is considered eligible for a NABERSNZ rating if all of the following eligibility criteria are met:

- a) *Building type*: During the **rating period**, the building or part of the building was used as an office, or is **fit for office use**.

Note 1: Purpose-built educational buildings (e.g. a school or non-office buildings on university campuses) or medical centre buildings are not considered **educational office facilities** or **medical office facilities** as they are not a Tenancy within a commercial office building. Therefore, they cannot be assessed for a NABERSNZ Energy and Water for Offices rating.

- b) *Building consumption data*: Less than 80 % of the building's total office **NLA** has been excluded due to lack of consumption data using the method described in Section 4.5.6.
- c) *Building energy or water coverage*: The minimum energy or water coverage for the **rating scope** and spaces included is met, as described in Chapter 7.
- d) *New buildings and major refurbishments*: New buildings or buildings undertaking major refurbishments are eligible for a NABERSNZ rating as soon as 12 months of a **rating period** can be completed. In these cases, the **rating period** can start as soon as one of the following conditions is met (whichever occurs first)—
 - 1) 75 % of the office **NLA** is occupied by tenants;
 - 2) it has been two years since the certificate of occupancy (however described in the relevant jurisdiction) was issued.
- e) *Building occupancy*: A premises is eligible for a rating when it is occupied for at least one day during the **rating period**. Where a premises is fully vacant for the entirety of a **rating period** it is not eligible for a NABERSNZ Rating for that period.

Note 2: Buildings with high levels of vacancy are eligible for a NABERSNZ rating to be conducted.

Note 3: Where a tenant requires full Base Building services to be provided and the minimum energy coverage is met, the affected **functional spaces** are considered occupied, and a Base Building rating can be completed. This is so, even if a space is not actively used by staff.

3.2.2 Tenancy rating

A Tenancy is considered to be eligible for a NABERSNZ Tenancy rating if all of the following eligibility criteria are met:

- a) *Tenancy type:* The Tenancy is used as an office, or, if unoccupied, is capable of being used as an office.
- b) *Tenancy consumption data:* Less than 80 % of the **complete Tenancy** office **NLA** has been excluded due to lack of consumption data (see Section 4.5.6).
- c) *Tenancy energy coverage:* The minimum energy coverage for the Tenancy rating and spaces included is met, as described in Chapter 7.
- d) *New buildings and major refurbishments:* Tenancies in new buildings or in buildings undertaking major refurbishments are eligible for a NABERSNZ rating as soon as 12-months of a **rating period** can be completed. In these cases, the **rating period** can start as it has been two years since the certificate of occupancy (or equivalent in the relevant jurisdiction) was issued.

Note: Tenancies with high levels of vacancy are eligible for a NABERSNZ rating to be conducted.

3.2.3 Multiple building versus single building ratings

NABERSNZ ratings are for single buildings.

The following list must be consulted in cases where it is unclear whether there are single or multiple buildings present. A majority of the following features is evidence of a single building:

- a) A common entry point for occupants.
- b) Interconnected access or the potential for interconnected access between areas.
- c) Central shared provision of the common services, such as heating and cooling.
- d) Capacity to be offered to a tenant as one building.
- e) Single owner.
- f) Buildings constructed at the same or within a short period of time of each other (within 2 years) and the original design allowed for the additional construction.
- g) Potential for New Zealand Building Code, Clause D1 – Access Routes compliant travel horizontally between the buildings without using basement, car park or plant rooms.
- h) Single public street address (i.e. the address the building is known publicly by).

- i) Single LOT number.
- j) A reasonable person would assume it is one building.

If the majority of these features are not met, more than one building may be present. Sufficient metering must be installed on each building for the buildings to be rated separately.

Exceptions may be made by the **Administrator**. Examples of exceptions may include:

- 1) Where it is not physically possible to install separate metering.
- 2) For a period of time until adequate metering can be installed.
- 3) Where there is a very small separate building on a site, that on its own would not warrant a separate rating.

Where **Assessors** are unsure if buildings should be separated for rating purposes, they should contact the **Administrator**. The **Administrator** reserves the right to determine what is considered a majority of features on a case-by-case basis.

3.3 Rating period

A NABERSNZ rating is based on a 12-month **rating period**. Once certified, the rating is valid for up to 12 months — this is called the **validity period**.

It takes time for the **Assessor** to complete a rating. Therefore 4 months are given to have the rating certified after the end of the rating period. Ratings certified after the 4 months will have a reduced **validity period** to ensure all ratings are based on current data.

Assessors may submit a NABERSNZ energy rating and NABERSNZ water rating for the same premises as a combined rating application. When submitting a combined rating application, both ratings must have the same **rating period**.

More information on the **rating period**, **validity period** and time limits for submission can be found in Appendix C.

3.4 Standards for acceptable data and estimates

3.4.1 General

An assessment for an accredited NABERSNZ for Energy or Water for Offices rating must be based on the **acceptable data** or **acceptable estimates** specified in the **Rules** (including applicable **Rulings**) or as directed by the **Administrator**.

Data and estimates must be of an acceptable standard. The decision process for determining **acceptable data** and **acceptable estimates** in Sections 3.4.2 and 3.4.3 below must be followed, except where another process is specifically allowed by a provision of these **Rules**.

Note: Specific procedures related to standards for **acceptable data** and **acceptable estimates** in individual sections of these **Rules** take precedence over the standards in Section 3.4.2 and 3.4.3. Where specific procedures are followed, the requirement for compliance with Sections 3.4.2 and 3.4.3 is deemed to be satisfied.

3.4.2 Acceptable data

If accurate and verifiable **acceptable data** is available, it must be used. Where a section of the **Rules** allows more than one type of data source to be used and no particular priority is given, the following order of preference applies:

- a) Data obtained directly by the **Assessor**.
- b) Data provided by a third party without a significant interest in the operation or performance of the building or its equipment (such as an energy or water **utility**), including one of the following:
 - 1) Documents or other records provided by a third party which can be verified by the source, e.g. **utility** bills.
 - 2) Documents or other records which cannot be independently verified but whose authenticity and accuracy is attested to by a credible and responsible person without a conflict of interest.
 - 3) Written information provided by a credible and responsible person, which includes their full name, position and contact details of the person giving the information.
 - 4) Verbal information provided by a credible and responsible person, recorded in writing by the **Assessor** with the full name, position and contact details of the person giving the information.
- c) Data provided by the owner commissioning the rating, or a third party with a significant interest in the operation or performance of the building or its equipment (such as a facility manager, technical contractor or equipment supplier), including one of the following:
 - 1) Documents or other records provided by a party to an agreement or transaction which can be verified by another party to the same agreement or transaction, e.g. contracts or other legal agreements.
 - 2) Documents or other records which cannot be independently verified but whose authenticity and accuracy is attested to by a credible and responsible person without a conflict of interest.
 - 3) Verbal information provided by a credible and responsible person, recorded in writing by the **Assessor** with the full name, position, and contact details of the person giving the information.

3.4.3 Acceptable estimates

If **acceptable data** is not available, estimates (including assumptions, approximations and unvalidated data) can be used if they are deemed to be **acceptable estimates** in accordance with these **Rules**.

Acceptable estimates must total to no more than $\pm 5\%$ of the overall rating greenhouse gas emissions or water consumption, as calculated when using the **NABERSNZ rating input form**. Where they are greater than 5 %, the building cannot be rated until sufficient **acceptable data** and/or **acceptable estimates** have been obtained.

See Section B.5 for more information.

3.5 Site visits

3.5.1 General

An integral part of all NABERSNZ ratings is the site visit to inspect the **rated premises**. The purpose of the site visit is as follows:

- a) Become familiar with the layout, services and features of the **rated premises**.
- b) Confirm that documentation provided for the assessment is accurate, complete and up to date.
- c) Check that all required spaces have been included in the **NLA**.
- d) Check for inclusions in, and exclusions from, energy and water coverage (as appropriate).
- e) Check floor configuration.
- f) Assess rated hours and occupancy for **functional spaces**.
- g) Count computers for Tenancy and Whole Building ratings.
- h) Visit plant rooms to ensure that all relevant equipment is covered under the meters included in the rating.
- i) Resolve any other issues that arise.

An **Assessor's** inspection of the **rated premises** is expected to include a check of the servicing arrangements provided to all **functional spaces**.

Site visits must occur during the **rating period** or during the 120 days period following the **rating period**.

A new site visit must be conducted as part of every NABERSNZ rating application. In most scenarios a physical site visit must be undertaken (see Section 3.5.2), though a virtual site visit may be appropriate in some circumstances (see Section 3.5.3).

3.5.2 Physical site visits

Assessors must conduct a physical site visit of the premises if any of the following circumstances apply:

- a) If the premises is subject to conditions requiring on-site checks including from Level 2 audits.
- b) It is the first time the premises is being rated by that **Assessor**.
- c) The **Assessor** is undertaking a supervised rating.
- d) A physical site visit was not conducted as part of the previous rating.
- e) The last site visit was conducted more than 12 months before the start of the rating period.
- f) If significant changes to servicing arrangements have been made.
- g) More than 20 % of the premises' total **NLA** has gone through either **fitout works** or strip out works during the rating period.

Note: **Assessors** must contact the **Administrator** to determine whether a virtual site visit might be appropriate in cases where a physical site visit is not possible for legitimate reasons (e.g. if travel can't be undertaken because of a declared natural disaster event).

3.5.3 Virtual site visits

An **Assessor** may elect to do a virtual site visit in lieu of a physical site visit only in scenarios where none of the conditions in Section 3.5.2 apply. A virtual site visit must include each of the following:

- a) A site inspection carried out by another **Assessor** accredited in a different tool, or a building or facility manager who is familiar with the site. The person conducting the site inspection must record photos and videos as they proceed, and this evidence may only be used for a single rating (that is, it must not be re-used for subsequent ratings).

Note: The **Assessor** is ultimately responsible for ensuring the person conducting the site inspection has sufficient competency and is clear about their objectives, and that they obtain the necessary evidence for the rating. The **Assessor** for a rating application remains responsible for the accuracy of the data collected by others when conducting a virtual site visit.

- b) Use of knowledge and notes from previous physical site visits. This must not include the re-use of actual data (e.g. area and hours).
- c) As relevant, confirmation of site plans, servicing arrangements and as-built drawings of fit outs (e.g. mechanical, electrical and/or desk layout drawings) received from building managers or facility managers.

A virtual site visit should be supported by other evidence as relevant, such as:

- 1) Screenshots from a remotely accessed BMS system.

When conducting a virtual site visit, **Assessors** must retain evidence of all communications used as part of confirming various aspects of the site, including from the **Assessor** to the person conducting the 'walk through'.

3.5.4 Delegating site visit to another Assessor

Where a physical site visit must be undertaken and the **Assessor** cannot undertake the physical site visit to inspect the rated premises, the **Assessor** may delegate this task to another **Assessor** specifically accredited in Energy and Water for Offices ratings.

The **Assessor** lodging the rating is responsible for the accuracy of the data. The **Assessor** must obtain and retain all the evidence required to prove their assumptions for auditing purposes, in accordance with the documentation requirements listed in Chapter 8.

Note: Delegating a site visit to another **Assessor** specifically accredited in Energy and Water for Offices ratings is not the same as a virtual site visit. Additional restrictions and standards of evidence apply to virtual site visits to offset the lower bar of accreditation required.

3.5.5 Situations where part of a site visit cannot be conducted or delegated

There may be circumstances where access to part of the premises is refused due to safety or security concerns. If this occurs, the **Assessor** must explain why they could not access these spaces, and fully document this in the **NABERSNZ rating input form**. Any known impacts on the quality of the information obtained for the assessment must also be fully described, e.g. an **acceptable estimate** has been used in the absence of verified data.

It is the responsibility of the customer to provide sufficient access to the premises to allow a rating to be undertaken. The **Administrator** should be contacted for assistance in situations where restrictions on carrying out a site visit are outside the control of both the **Assessor** and the customer (e.g. if travel can't be undertaken because of a declared natural disaster event).

3.6 Documentation and record-keeping

3.6.1 Required documentation

An assessment may be based on copies of original documents such as **utility** bills, signed leases and other records, as long as the **Assessor** is satisfied that they are, or can be verified to be, true and complete records of the original documents or files. Access to original documents is preferred if they are available. Partial copies of original documents must be sufficient to identify the original document including date, title and file name.

3.6.2 Record-keeping for auditing purposes

Assessors must keep all records on which an assessment is based.

The records kept by **Assessors** must be to such a standard that it would be possible for another **Assessor** or an **Auditor** to accurately repeat the rating using only the documents provided. This includes records of assumptions and all information and calculations used as the basis for **acceptable estimates**. The records kept must be the actual documents used for the assessment or verifiable copies. Summaries or other derivative documents that quote the original source documents are not acceptable, even if prepared by the **Assessor** from original documents.

Digital copies of documents are considered acceptable in all cases.

Records must be kept for seven years from the date the rating application was submitted and be made available for audit on request.

Note: **Assessors** remain responsible for ratings they have conducted, even if they move companies.

A list of the usual documentation for a rating is presented in Chapter 8, however, additional documentation may also be required to permit an **Auditor** to accurately repeat the rating using only the documents provided.

3.7 Alternative methodologies

Assessors may be required to use alternative methodologies for obtaining or interpreting data for an assessment where standard methods outlined in the NABERSNZ **Rules** cannot be applied. At a minimum, the alternative methodology must be one of the following:

- a) Equivalent to the preferred method in terms of its results, accuracy and validity.
- b) Acceptable in place of the preferred method, subject to the data resulting from the alternative method being treated as an estimate in accordance with Section 3.4, or other specified conditions on the use of the data.

All alternative methodologies must be approved by the **Administrator** prior to use. For further information, please contact the **Administrator**.

4 Rated area

4.1 General

There are several factors which impact the consumption of energy and water in an assessment and therefore affect a NABERSNZ Energy and Water for Offices rating. The first of these factors is **area**. The **rated area** must be correctly determined to allow for fair comparison.

 For documentation requirements, see Section 8.2.

4.2 Process overview

Table 4.2 below outlines the process for calculating **rated area** for:

- Base Building energy ratings.
- Tenancy or Whole Building energy.
- Stand-alone water ratings.
- Water ratings combined with a Base Building energy rating.

Table 4.2: Determining rated area

Step		Reference
1	Determine the total office NLA for the rated premises .	4.3
2	Divide the total office NLA into easily workable functional spaces with separate spaces, vacancies and hours of operation.	4.4
3	For each functional space , determine if the space must be excluded.	4.5
4	Add up only the resulting included functional space areas to obtain the net office NLA .	N/A
5	Cap the inclusion of public access space to a maximum of 10 % of the net office NLA .	4.6.2
6	For Base Building ratings only, determine spaces qualifying as medical or educational office facilities and cap their inclusion to a maximum of 25 % of the net office NLA .	4.6.3

7	Determine occupancy of functional spaces during the rating period .	4.7
8	The sum of the resulting occupation-weighted functional space NLA included in the rating is the rated area .	N/A

The **NLA** is the starting point for calculating the **rated area**. The **Assessor** must then divide the **NLA** into **functional spaces**, determine exclusions, limit the proportion of medical or educational facility spaces and **public access spaces** and finally assess occupancy. This will require copies of plans, leases and site investigation.

Example: A floor might be verified to the **measurement standard for rated area**, but for convenience of hours calculations, it might have several **functional spaces** measured from not-to-scale layouts. Since the overall area is verified, there is no need to add the **functional space** floor areas to the **potential error** for area.

4.3 Determining office Net Lettable Area

4.3.1 General

4.3.1.1 Base Building and Whole Building ratings

For Base Building and Whole Building ratings, the **Assessor** must consider the **NLA** of all spaces that are leased, or available for lease, for office tenancies in the building.

4.3.1.2 Tenancy ratings – complete or separate

For Tenancy ratings, the **Assessor** must consider the **NLA** of all spaces that are included in the **complete Tenancy** being rated.

4.3.1.3 Treatment of government tenancies

All Tenancies that can be attributed to a single government jurisdiction may be treated as a single **complete Tenancy** for that government jurisdiction or as separate tenancies.

A useful example is an office building that contains a Department of Justice Tenancy and a Department of Education Tenancy. As both Tenancies are from the same government, they may be rated either as a single government Tenancy or as separate tenancies if metering allows.

 For documentation requirements, see Section 8.2.1.

4.3.2 Standard for acceptable data

The office **NLA** of the **rated premises** must be verified by the **Assessor** to have been measured in compliance with the **measurement standard for rated area**, by one of the following methods (listed in order of preference)—

- reference to a third-party survey or to lease documentation that is explicitly based on the **measurement standard for rated area**; or, if not available,

- b) direct measurement from current plans or scaled prints, measured to the **measurement standard for rated area**; or, if not available,
- c) site measurements verified by the **Assessor** to have been done to the **measurement standard for rated area**.

Regardless of the method used to determine the **NLA**, the **Assessor** must ensure that the information accurately reflects the configuration of the building and its uses during the **rating period**. Survey information must be checked through a site inspection to ensure the space has not been altered, for example by the introduction of corridors to serve multiple tenancies. **Assessors** must also confirm that the **measurement standard for rated area** has been interpreted correctly.

An unverified Tenancy schedule is not a suitable document on which to base the **NLA** assessment.

Note: This effectively means that, for any rating, all non-**NLA** spaces including common areas, purpose-built retail facilities and accessways must be disregarded as they cannot be considered as **NLA**.

4.3.3 Area measurement estimates

If the office **NLA** of the **rated premises** cannot be verified by the **Assessor** in accordance with Section 4.3.2, then the estimated area of that space must be added to the **potential error** for area.

Note: Subdivision of spaces is not as critical as overall areas. For example, a floor might be verified to the **measurement standard for rated area**, but for convenience of hours calculations, it might have several **functional spaces** measured from not-to-scale layouts. Since the overall area is verified, there is no need to add the **functional space** floor areas to the **potential error** for area.

4.4 Dividing the office Net Lettable Area into functional spaces

4.4.1 General

After determining the office **NLA** of the **rated premises**, this office **NLA** must be divided into **functional spaces** in order to calculate the effects of vacancies and differing operational hours across the total office **NLA**. These spaces should be based on existing functional distinctions such as physical boundaries, leases, or operational divisions.

Most **office support facilities** do not need to be separated into their own **functional spaces** as they will have the same periods of occupation and operating hours as the office space. For Tenancy and Whole Building ratings, **office support facilities** (besides **computer server rooms**) are only required to be separated out into their own **functional space** when there is a significant difference in period of occupation or operating hours.



For documentation requirements, see Section 8.2.2.

4.4.2 Minimum requirement for division of office NLA

For all ratings, a **functional space** must be the smallest of the following:

- a) Each individual contiguous floor plate of the building (i.e. for buildings with multiple units or towers, this refers to each floor of each unit or tower); or
- b) Each individual and distinct Tenancy, regardless of its size; or
- c) Within any Tenancy, any section that must be treated as distinct because of a significant difference in period of occupation or operating hours. This must include:
 - 1) Spaces in which significant construction activity has taken place for **fitout works** during the **rating period**; and
 - 2) Spaces associated with different AHAC zones and AHAC hour counts or **office support facilities** that have a significant difference in operating hours to the surrounding office space.
- d) Any **computer server room** or series of contiguous **computer server rooms** that constitute more than 5 % of that respective floor plate's **NLA**; or
- e) Any **meeting room** or series of contiguous **meeting rooms** that constitute more than 10 % of that respective floor plate's **NLA** and have supplementary air conditioning or hours of operation that are different to the surrounding offices.

In addition, any space which meets either of the following two conditions must also be separated into its own **functional space** for the purpose of exclusion under Section 4.5.6:

- 1) **Acceptable data** or **acceptable estimates** of energy and/or water consumption (as relevant, within the coverage of the rating) is not available for reasons beyond the control of the **Assessor** or customer; or
- 2) Where it is not possible to include all the energy required to be included under the energy coverage (typically because of supplementary air conditioning that has been allocated to the Base Building under Section 7.3 but is not on the Base Building meter).

This provision does not apply to any **computer server room** or **meeting room** not required to be separated under provisions (d) and (e) above.

Note 1: The requirements in this section are intended to make it easier for the **Assessor** to separate independent spaces and record the necessary data, not to fragment the **NLA** into multiple similar spaces for no real benefit.

Note 2: Small **office support facilities** whose operating hours depend on the spaces nearby should be treated as an integrated component of the surrounding office space. They should not normally be separated out into a different **functional space**. However, if the **Assessor** judges that the division of office **NLA** into smaller spaces will improve the rating accuracy, such a division can be deemed acceptable.

Example: **Computer server rooms** that make up less than 5 % of the floor plate **NLA** for Whole Building and Tenancy ratings. These could be separated into separate **functional spaces** to better reflect the hours for these spaces which are usually serviced by tenant **supplementary air conditioning equipment** 24/7.

 For documentation requirements, see Section 8.2.2.

4.5 Excluding functional spaces

4.5.1 General

After dividing the office **NLA** into **functional spaces**, the **Assessor** must determine the nature of each of the **functional spaces** and include or exclude them as required.

The following must be excluded from the **rated area** calculation:

- a) Spaces within the office **NLA** that have not been used as offices (as per the requirements of Sections 4.5.2 and 4.5.3) during the **rating period**.
- b) **Computer server rooms** or other **office support facilities** as per the requirements of Sections 4.5.4 and 4.5.5.
- c) Spaces with no consumption data, as per the requirements of Section 4.5.6.

This ensures that ratings are consistently based on office usage of buildings and provide a fair comparison between different offices.

Note 1: Exclusions are only considered *after* calculating the office **NLA** as described in Section 4.3. The criteria in this section cannot be applied to areas that are not within the office **NLA**, as these are never included in the **rated area** calculation.

Note 2: The energy or water consumption associated with an excluded space may still need to be included in the assessment in accordance with Chapter 7.

Note 3: For consistency and ease of auditing, the area of a space that has been excluded should be entered into the **NABERSNZ rating input form** and indicated as such. This area can be approximated by the **Assessor** as it is not used in the calculation of the NABERSNZ rating. Occupied days, hours and computer counts for excluded spaces do not need to be provided in the **NABERSNZ rating input form**.

 For documentation requirements, see Section 8.2.3.

4.5.2 Excluding spaces that are office NLA subject to commercial negotiation

The **measurement standard for rated area** offers provision for spaces that do not fit the definition of **NLA** to be counted as such, subject to commercial negotiations between the building owner and the tenant.

In most situations, these types of spaces must be excluded from the **rated area** as they are not considered normal office space. It may be permissible to include these spaces in the **rated area** if all of the following conditions are met:

- a) There is documented evidence that such spaces have been considered as **NLA** following commercial negotiations between tenants and the building owner.
- b) The spaces are **fit for office use**.

- c) The spaces are used to accommodate office spaces (as opposed to **office support facilities**).
- d) The spaces are not located within a building foyer, atrium, lift, lobby, car parking spaces or dedicated walkway.

Note: Spaces such as foyers and lobbies are present in most office buildings, and typically neither are used as offices nor meet the definition of **NLA**. However, the **measurement standard for rated area** does allow spaces such as these to be included in the building's **NLA** if commercial negotiations between owners and tenants allow it. Despite this, NABERSNZ does not allow these spaces to be included in the **rated area**. The reason for this is that including these spaces artificially increases the **rated area** and can make the building appear to perform better than the same building that has not included these areas. Hence the requirements of this Section 4.5.2 ensure a fair comparison between buildings can be made irrespective of these commercial negotiations.

 For documentation requirements, see Section 8.2.3.

4.5.3 Excluding spaces that cannot be considered offices

A **functional space** area must be excluded when any of the following criteria are met:

- a) The space has been used for a purpose other than accommodating an office or an **office support facility**. This applies whether or not the space was originally intended as office accommodation.
- b) It is not **occupied** for any part of the **rating period** (as per Section 4.7 for each **rating scope**).
- c) It is not **fit for office use**.

It is not necessary to exclude a space with a floor area less than 5 m² unless it is a well-defined separate facility (e.g. surrounded by walls). However, where several similar excludable spaces or facilities are located next to each other, they must be considered to be a single group and not individual items. See Table 4.5.3 and Figure 4.5.3 below for examples.

 For documentation requirements, see Section 8.2.3.

Table 4.5.3: Examples of area exclusions

Example		Interpretation
1	A space originally designed for office accommodation but not used as an office nor exclusively for the use of office tenants – such as a suite of training rooms for hire, a commercial art gallery, a showroom, an information centre	Excluded. They are not used as offices or office support facilities .

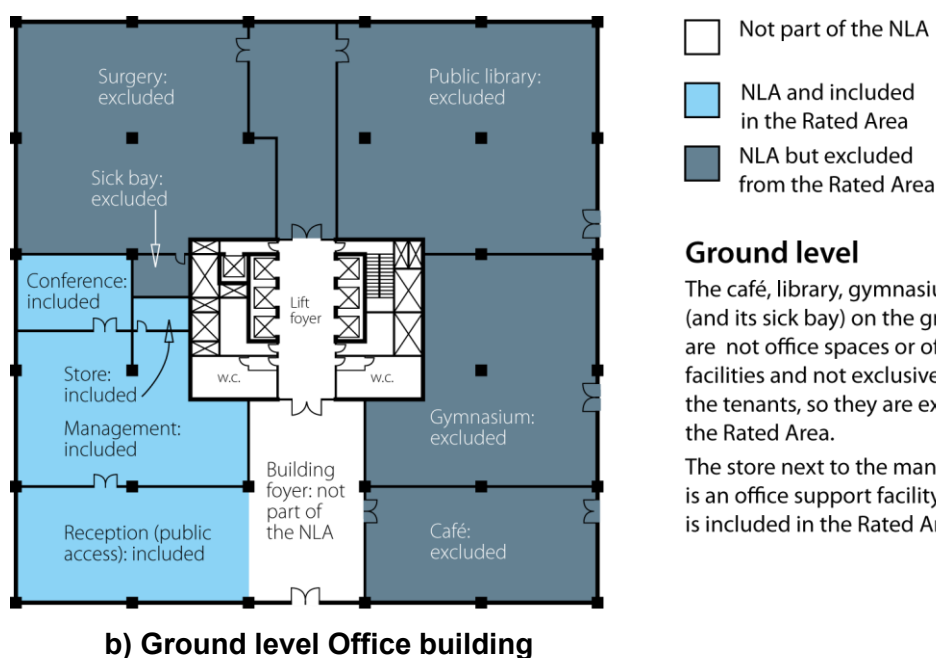
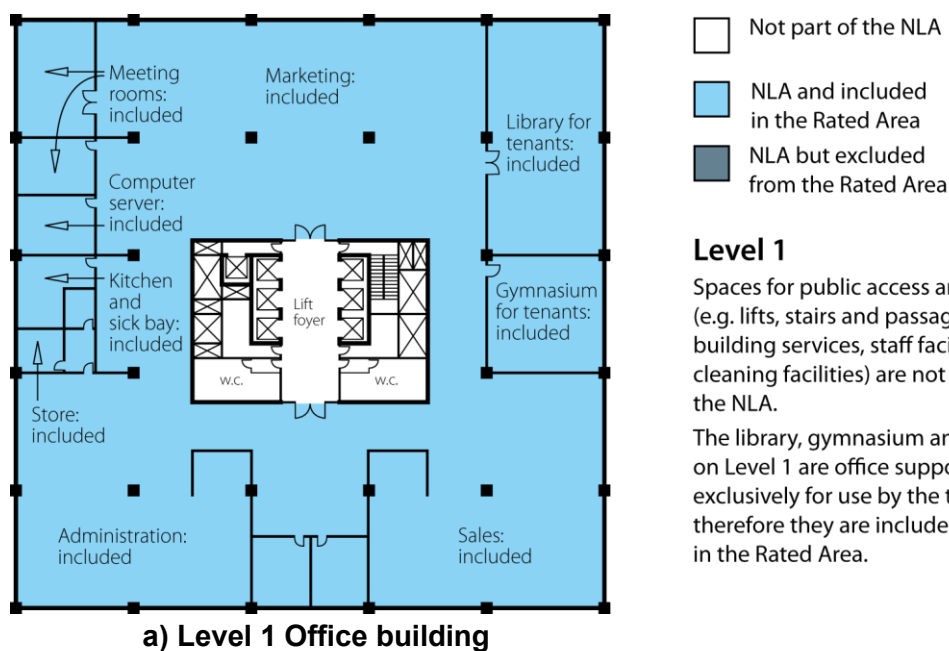
Example		Interpretation
2	A space designed for retail accommodation, considered as Gross Lettable Area Retail (GLAR) but used as an office space Example: A Tenancy in a shopping centre used as an accountant's office.	Excluded. The space is not considered as office NLA .
Spaces used primarily for providing services to the public		
3	Retail spaces selling goods and products (shops)	Excluded. They are not used as offices or office support facilities . They are retail outlets.
4	Government spaces open to public including Centrelink and Medicare	Limited inclusion. Customer service areas requiring appointments or escort can be considered as office spaces. Waiting areas are still considered as public access spaces and must be included in the 10 % allowance of public access spaces .
5	Other Tenancy spaces with a primary purpose of providing services to walk-in customers; and where the office portion supports the retail space Example: Bank branch open to the public, post office, real estate agency, travel agency, information centre, print shop.	Excluded. These are retail outlets.
Cafeterias and cafés		
6	Exclusively for the use of office tenants (and their visitors)	Included , where the space is part of the NLA . They are office support facilities .
7	With public access (but can also be used by tenants)	Excluded. They are retail outlets.
Gymnasiums, child minding centres, treatment rooms and similar		
8	Exclusively for the use of office tenants (and their visitors)	Included , where the space is part of the NLA . They are office support facilities .
9	With public access (but can also be used by tenants)	Excluded. They are retail outlets.

Example		Interpretation
10	Call centres and trading rooms	Included. They are high-density office spaces.
11	Breakout spaces, meeting rooms , eating areas or tea rooms and kitchenettes built as part of the tenant fitout	Included. They are office support facilities .
Tenant-fitted-out toilets and showers		
12	Toilet and shower facilities with a contiguous area over 5 m ²	Excluded. Although they are office support facilities , they are not fit for office use .
13	Small 'ensuite' toilets, etc., with individual floor area under 5 m ²	Included. Although they could be excluded as not fit for office use , this is not required as the area is so small.
14	End of trip facilities	Excluded. Although they are office support facilities , they are not fit for office use .
Change rooms (within the NLA)		
15	Integral to the toilet and shower facility, with only exhaust air systems and low-level lighting	Excluded. Although they are office support facilities , they are not fit for office use .
16	Partitioned-off office space with air conditioning and lighting as for the rest of the office	Included , where the space is part of the NLA . They are office support facilities , and located in spaces fit for office use .
Storage spaces		
17	A chain-wire enclosed store in the basement	Excluded. This space is not (and cannot become) fit for office use .
18	A similar enclosed space within the fitted-out Tenancy floor	Included. This is an office support facility and is fit for office use .
19	An archival store with lighting, temperature and humidity settings for preserving paper, not for comfort	Excluded. This space is not fit for office use .
20	A compactus file storage facility within the fitted-out Tenancy floor with air conditioning and lighting as for the rest of the office	Included. This is an office support facility and is fit for office use .

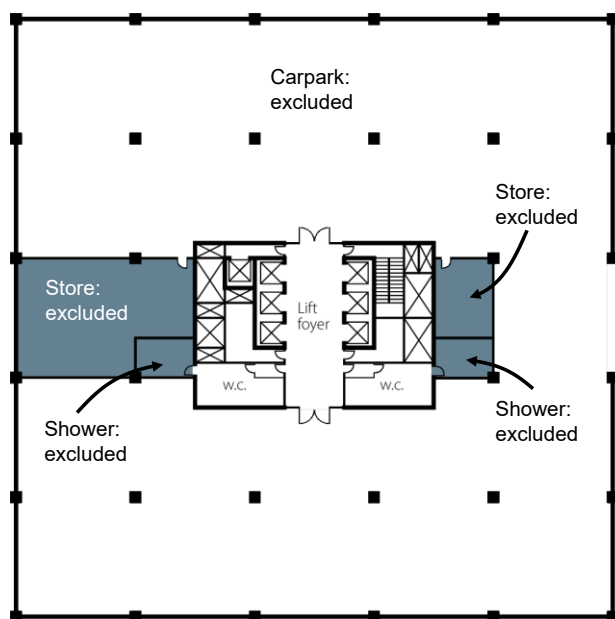
Example		Interpretation
Other spaces		
21	A professional library in a lawyer's or consultant's office	Included. This is an office support facility for professional work.
22	A public library in an office building	Excluded. This is a facility for the general public and is not an office.
23	A large vault designed as a secure store (such as for paper or gold) and not for continual occupation by people	Excluded. Even if empty, this store is not fit for office use .
24	The same vault that is part of the NLA , converted to office space with air conditioning and lighting	Included. Although originally a store, the space is now fit for office use .
25	Building Manager's office	Included, where the space is part of the NLA and fit for office use. Excluded, where the space is not part of the NLA or not fit for office use. Note: In general, Building Manager's offices should only be included in the rated area if the space could be leased out to another tenant as an office.
Basement areas		
26	A basement area not fit for continual occupation by people	Excluded. The space is not fit for office use .
27	A basement area part of NLA and converted to office space and fit for office use	Included. This is an office space and is fit for office use .
28	A basement area that is not part of NLA but has been converted to office space and is fit for office use	Excluded. This space is not office NLA .
29	An enclosed store in the basement part of NLA that is fit for office use and currently used as a storage space	Included. The space is fit for office use and is used as an office support facility .

The following diagrams in Figure 4.5.3 a), b) and c) represent an office building over three levels and show how the areas are to be treated:

Figure 4.5.3: Examples of Net Lettable Area, rateable area inclusions and exclusions



Note: It can be seen that the two gymnasiums (Level 1 and Ground level) are treated differently depending on their use, so the defining criteria is not so much the actual function of the space but the way it is used by the occupants in the context of a specific office.



-  Not part of the NLA
-  NLA but excluded from the Rated Area

Basement

The carpark is not part of the NLA, so it is excluded from the Rated Area.

The shower and change rooms were fitted out by the tenant, exclusively for use by the tenant, but they are not fit for office use so they are excluded from the Rated Area.

The small store is not and cannot become part of an office, so it is excluded from the Rated Area. The larger store has lighting and air conditioning but is used as a commercial storage facility and is not part of an office, so it is excluded from the Rated Area.

c) Basement Office building

4.5.4 Excluding computer server rooms and data centres

4.5.4.1 General

A **computer server room** may not always be separated into its own **functional space**, as described in Section 4.4.2.

 This section outlines the conditions where a **computer server room** must be excluded.

Note: The inclusion or exclusion of both the energy consumption and the floor area of **computer server rooms** are determined in the same way; see Section 7.3.1.

4.5.4.2 Computer server rooms: Base Building ratings

Where a **computer server room** has been separated into its own **functional space** and is not considered a **data centre** (as defined in Section 4.5.4.4), the air conditioning arrangement must be checked by the **Assessor** and the **computer server room** excluded from the **rated area** if any of the following criteria are met:

- a) No **direct HVAC** is provided by the Base Building to that space (i.e. all **direct HVAC** is provided by tenant supplementary units only).
- b) **Direct HVAC** is provided by the Base Building but at a lesser standard than that of the surrounding spaces.
- c) **Direct HVAC** is provided by the Base Building and is being adequately sub-metered and excluded from the rating in line with Section 7.3.1.1.

Example: **Computer server rooms** provided with condenser water only from the Base Building (i.e. air supply is connected to the tenant electrical distribution board) are serviced at a lesser standard than the rest of the office space. Their area therefore is excluded.

Note 1: Only **computer server rooms** that are not considered to be a **data centre** and have **direct HVAC energy** provided centrally by the Base Building to at least the same standard as the surrounding space (with this **direct HVAC energy** being included in the rating) should be included for the **rated area** calculation.

Note 2: The presence of a tenant supplementary unit does not immediately exclude the **computer server room** from the **rated area**. As long as the Base Building provides **direct HVAC** to the same or higher standard as the surrounding office space, the **computer server room** is still considered to be centrally serviced.

Where it is determined that a **computer server room** must be excluded, the Base Building rating must exclude the area of the **computer server room's functional space** from the **rated area** calculation.

 For documentation requirements, see Section 8.2.4.

4.5.4.3 Computer server rooms: Whole Building and Tenancy ratings

When a **computer server room** has been separated into its own **functional space**, the floor area of a **computer server room** must be treated as follows:

- a) **Wholly included** in the calculation of the **rated area**, if all of the following conditions are satisfied:
 - 1) The **computer server room** does not qualify as a **data centre** (see Section 4.5.4.4).
 - 2) The **computer server room** is not used as a disaster recovery site for another external **data centre**.
 - 3) The **computer server room** is used entirely by internal users.
- b) **Partially excluded** from the calculation of the **rated area**, if all of the following conditions are satisfied:
 - 1) The **computer server room** is a mixture of internal use and **external use**, to a maximum of 75 % of its capacity dedicated to **external use**.
 - 2) The energy consumption of the externally used IT equipment and/or facility services are separately sub-metered.
 - 3) The floor area of the **computer server room** that is to be excluded is determined by measuring the area covered by the externally-used IT equipment only.
 - 4) The **Assessor** must obtain written documentation from the tenant that confirms that the IT equipment in the area to be excluded is either for external use or as a disaster recovery site for another external data centre.

- c) **Proportionately excluded** from the calculation of the **rated area**, if all of the following conditions are satisfied:
- 1) The **computer server room** is a mixture of internal use and **external use**, to a maximum of 75 % of its capacity dedicated to **external use**.
 - 2) The energy consumption of the **computer server room** IT equipment and/or facility services are sub-metered.
 - 3) The externally used equipment is not or cannot be separately sub-metered from internal .
 - 4) The number of internal users and **external users** of the IT equipment can be determined.

Note 1: No proportionate exclusions are available for **external users** of public web servers because of the difficulty in accurately counting the number of users.

The floor area of the **computer server room** that may be excluded is determined through the following steps:

Step 1 – Determine the number of internal users of the IT equipment, based on the computer count.

Step 2 – Determine the number of **external users** of the IT equipment.

Note 2: To determine the number of **external users** of the IT equipment, **Assessors** could analyse system usage logs to establish the number of unique users, and then find the location of each from asset tracking, phone records or similar data.

Note 3: To avoid double counting, occupants of the **rated premises** who access the systems remotely are included in the number of internal users of IT equipment only.

Step 3 – Calculate the area allocated for external use, based on the proportion of **external users** to total users.

Example: If the floor area of a **computer server room** is 50 m² and there are 100 internal users and 400 **external users**, the area to be excluded from the **rated area** is calculated as:

$$50 \times \frac{400}{400 + 100} = 40 \text{ m}^2$$

The **Assessor** must obtain either—

- 1) written documentation from the tenant that confirms the number of **external users** of the **computer server room**; or
- 2) records which allow the **Assessor** to accurately calculate (not estimate) the number of **external users**.



For documentation requirements, see Section 8.2.4.

4.5.4.4 Data centres

Where a **computer server room** qualifies as a **data centre**, then—

- a) this space is not considered office space and the area must be excluded from the **rated area** calculation; and
- b) the **Assessor** must obtain written documentation confirming that the **computer server room** is a **data centre** as defined in Chapter 2.

The combination of multiple **computer server rooms** is not considered a **data centre**. Each individual **computer server room** must meet the criteria as defined above to be considered as a **data centre**.

 For documentation requirements, see Section 8.2.5.

4.5.5 Excluding other office support facilities

4.5.5.1 General

This Section applies to all **office support facilities**, including **meeting rooms**.

This Section does not apply to **computer server rooms**, which are covered under Section 4.5.4.

4.5.5.2 Base Building ratings

If an **office support facility** or **meeting room** is not required to be separated into its own **functional space** as described in Section 4.4.2, the area of the **office support facility** or **meeting room** must be combined with an adjacent **functional space** included in the **rated area**.

Where an **office support facility** or **meeting room** has been separated into its own **functional space**, the air conditioning arrangement must be checked by the **Assessor** and the space excluded from the **rated area** if—

- a) no **direct HVAC** is provided by the Base Building to that space;
- b) **direct HVAC** is provided by the Base Building to that space but to a lesser standard than the rest of the office. This includes situations where tenant **supplementary air conditioning equipment** is present; or
- c) the **functional space** is centrally serviced by condenser water only.

Note: Air from the surrounding **functional space** ‘spilling’ into the **meeting room** or **office support facility** (‘spill air’) is not considered **direct HVAC**.

4.5.5.3 Whole Building and Tenancy ratings

The floor area of a **meeting room** or other **office support facility** must be included in a Tenancy or Whole Building rating.

 For documentation requirements, see Section 8.2.6.

4.5.6 Functional spaces without consumption data

Where **acceptable data** or **acceptable estimates** of the energy and/or water consumption for a **functional space** are not available for reasons beyond the control of the **Assessor** or customer, the **functional space** must be excluded from calculation of the **rated area**.

Note 1: This includes scenarios where the use of **acceptable estimates** results in a **potential error** above the 5 % threshold.

Examples of **functional space** exclusions include the following:

- a) When **utility** bills for energy consumption within the minimum energy coverage cannot be obtained for **functional spaces** within buildings that do not have an **embedded network**. Situations where this may occur include:
 - 1) When tenants have left the building and cannot be contacted to obtain energy bills; and
 - 2) When, for Base Building and Whole Building ratings, the tenants refuse to provide required energy bills.

Note 2: See Section 8.2.6 for further details and evidence requirements.

- b) When the **utility** was unable to provide the necessary data to cover the minimum energy and water coverage for the **functional space**.
- c) When a non-utility **metering system** was unable to provide the data necessary to cover the minimum energy coverage for the **functional space** and estimates were above the 5 % **potential error** allowance.
- d) When **functional spaces** are being served by tenant **supplementary air conditioning equipment** meeting standard Base Building air conditioning service requirements and where **acceptable data** or **acceptable estimates** of the energy/water use of the tenant **supplementary air conditioning equipment** (as per Section 7.3.2) is not available.

Note 3: The full range of consumption data required for a **functional space** is specified in Chapter 7.

Note 4: **Functional spaces** without hours data cannot be excluded in the same way as spaces without consumption data. These spaces must be included, and another method of measuring hours used. (Such a situation can occur, for example, when a tenant has moved out and a **TOS** cannot be obtained.)



For documentation requirements, see Section 8.2.6.

4.6 Medical or educational office facilities and public access spaces

4.6.1 General

After excluding **functional spaces**, the **Assessor** must limit the proportion of **public access spaces** followed by **medical** or **educational office facility** spaces

4.6.2 Public access spaces

Note: The **functional spaces** included so far may include some spaces open to public access such as inquiry desks, courier counters and reception areas. The primary purpose of these spaces is to accommodate arrivals, deliveries and despatches associated with office activities. These spaces are distinct from non-**NLA** or commercially negotiated **NLA** public spaces in building foyers and other common spaces, which are never included in the **rated area** calculation.

In calculating the **rated area** of a **rated premises**, the allowable total floor area of such **public access space** is capped to a maximum of 10 % of the net office **NLA**.

For this section, net office **NLA** is defined as:

Formula 4.6.2a

$$\text{Net Office NLA} = \text{Total Office NLA} - \text{Area of public access space}$$

Any additional amount must be excluded from the **rated area** calculation. The maximum **public access space** in a given area that can be included in a rating is calculated using the following formula:

Formula 4.6.2b

$$\left(\frac{\text{Net Office NLA}}{0.9} \right) - \text{Net Office NLA} = \text{Maximum public access space}$$

The 10 % ratio applies to the aggregate area of the spaces to be included in the rating. It is not calculated separately for individual **functional spaces**, floors or (for Base Building and Whole Building ratings) individual tenancies.



For documentation requirements, see Section 8.2.7.

Example 1: An office has a total **NLA** of 500 m². A large reception space that measures 5 m x 12 m (60 m²) is located within the total **NLA**.

The net office **NLA** is calculated as:

$$500 \text{ m}^2 - 60 \text{ m}^2 = 440 \text{ m}^2$$

Therefore, the maximum public access space that can be included for this rating is calculated as follows:

$$\left(\frac{440 \text{ m}^2}{0.9} \right) - 440 \text{ m}^2 = 48.9 \text{ m}^2$$

As the reception space is greater than the maximum allowable, only 48.9 m² of the reception space can be included.

Example 2: An office with a total **NLA** of 1,000 m² has two tenancies.

Tenancy #1 has a total **NLA** of 600 m², including a large reception space that measures 72 m².

Tenancy #2 has a total **NLA** of 400 m² and has no **public access space**.

Base Building or Whole Building Rating

For a Base Building or Whole Building Rating, the net office **NLA** is calculated as:

$$1,000 \text{ m}^2 - 72 \text{ m}^2 = 928 \text{ m}^2$$

Therefore, the maximum public access space that can be included for this rating is calculated as follows:

$$\left(\frac{928 \text{ m}^2}{0.9} \right) - 928 \text{ m}^2 = 103.1 \text{ m}^2$$

As the reception space is less than the maximum allowable, the entire reception area can be included.

Tenancy Rating

For a Tenancy Rating for Tenancy #1, the net office **NLA** is calculated as:

$$600 \text{ m}^2 - 72 \text{ m}^2 = 528 \text{ m}^2$$

Therefore, the maximum public access space that can be included for this rating is calculated as follows:

$$\left(\frac{528 \text{ m}^2}{0.9} \right) - 528 \text{ m}^2 = 58.7 \text{ m}^2$$

As the reception space is greater than the maximum allowable, only 58.7 m² of the reception space can be included.

4.6.3 Medical or educational office facility spaces

4.6.3.1 General

After limiting the proportion of **public access spaces**, the **Assessor** must determine and limit the proportion of **medical** and/or **educational office facility** spaces. The **Administrator** should be contacted if there is any doubt as to whether a facility or part of a facility is included in either of these categories (medical or educational).

A **medical office facility** may include—

- a) consulting rooms;
- b) patient reception areas;
- c) break-out spaces;
- d) **meeting rooms**;
- e) medical administration areas; and
- f) associated store rooms for medical equipment, supplies or records.

A space within the facility that is not serviced by Base Building services does not qualify as a **medical office facility**.

Note 1: Administration areas within a medical tenancy may meet the definition of an office as well as a **medical office facility**.

If a **functional space** includes both administration areas and other types of **medical office facility** spaces, the entire **functional space** is considered a **medical office facility** subject to the restrictions in Sections 4.6.3.2 and 4.6.3.3.

Assessors are permitted to divide a **medical office facility** into multiple **functional spaces** to separate out the administration areas if this would improve the accuracy of the rating. In this situation, the administration area would be considered office space rather than a **medical office facility**, and would not be subject to the restrictions in Sections 4.6.3.2 and 4.6.3.3.

If a medical facility contains—

- 1) hospitals;
- 2) operating theatres;
- 3) specialist medical imaging practices;
- 4) laboratories;
- 5) day-stay treatment areas;
- 6) wards;
- 7) specialist emergency medicine facilities;
- 8) pharmacies; or
- 9) dental surgeries;

then the entire facility cannot be considered as a **medical office facility** and must be excluded from the rating. The determining factor here is whether there is significant medical or scientific equipment present, or a requirement to operate continually.

Note 2: A medical facility that contains any of the items listed in 1) to 9) is not permitted to be divided into **functional spaces** smaller than the minimum requirements in Section 4.4.2.

An **educational office facility** may include—

- i) classrooms;
- ii) seminar rooms;
- iii) break-out spaces;
- iv) meeting rooms;
- v) student computer labs;
- vi) administration areas; and
- vii) store rooms.

A space within the facility that is not serviced by Base Building services does not qualify as an **educational office facility**.

Note 3: Workshops, laboratories, art studios, teaching kitchens or associated prep areas are not considered **educational office facilities**.

 For documentation requirements, see Section 8.2.8.

4.6.3.2 Base Building ratings

Although they are not office spaces as such, **medical office facilities** and **educational office facilities** can be included in the calculation of the **rated area** for the purposes of a NABERSNZ Base Building rating. This is acceptable only if **direct HVAC energy** provided by the Base Building to these facilities are not sub-metered, and with the caveat that the inclusion combined area of **medical office facilities** and **educational office facilities** is capped to a maximum of 25 % of the office **NLA**.

For this section, net office **NLA** is defined as:

Formula 4.6.3.2a

Net Office NLA = Total Office NLA – Combined area of medical and educational office facility

Note that this inclusion is calculated after having adjusted the office **NLA** for the **public access spaces** 10 % cap as per Section 4.6.2.

The maximum **medical office facilities** and **educational office facilities** in a given area that can be included in a rating is calculated using the following formula:

Formula 4.6.3.2b

$$\left(\frac{\text{Net Office NLA}}{0.75} \right) - \text{Net Office NLA} = \text{Maximum medical and educational office facility}$$

A rating including **medical** or **educational office facilities** must include the energy consumption relevant to the Base Building energy coverage for this space in full. No apportionment is allowed.

If **direct HVAC energy** provided by the Base Building to the facilities is adequately sub-metered, these spaces must be excluded as the associated Base Building **direct HVAC energy** is able to be excluded.

Note: Public reception or patient waiting rooms within **medical** or **educational office facilities** should have already been included in the **public access space** requirement.

Example 1: An office building has a total NLA of 2,500 m². Within this **NLA**, 1,500 m² is **occupied** by a tenant that is an English college.

The net office **NLA** is calculated as:

$$2,500 \text{ m}^2 - 1,500 \text{ m}^2 = 1,000 \text{ m}^2$$

Therefore, the maximum **medical office facilities** and **educational office facilities** that can be included for this rating is calculated as follows:

$$\left(\frac{1,000 \text{ m}^2}{0.75} \right) - 1,000 \text{ m}^2 = 333.3 \text{ m}^2$$

As the English college **occupies** a space greater than the maximum allowable, only 333.3 m² can be included.

Example 2: An office building has a total NLA of 8,000 m². Within this **NLA**:

- a) 1,500 m² is **occupied** by a tenant that is an English college.
- b) 400 m² is **occupied** by a tenant that is a doctor's surgery.

The net office **NLA** is calculated as:

$$8,000 \text{ m}^2 - (1,500 \text{ m}^2 + 400 \text{ m}^2) = 6,100 \text{ m}^2$$

Therefore, the maximum **medical office facilities** and **educational office facilities** that can be included for this rating is calculated as follows:

$$\left(\frac{6,100 \text{ m}^2}{0.75} \right) - 6,100 \text{ m}^2 = 2,033.3 \text{ m}^2$$

As the combined area of the **medical office facilities** and **educational office facilities** in this building is less than the maximum allowable, the entire combined area can be included.

Example 3: An office building has a total **NLA** of 9,000 m². Within this **NLA**, 1,000 m² qualify as a **medical office facility**.

The net office **NLA** is calculated as:

$$9,000 \text{ m}^2 - 1,000 \text{ m}^2 = 8,000 \text{ m}^2$$

The maximum **medical office facilities** that can be included is:

$$\left(\frac{8,000 \text{ m}^2}{0.75} \right) - 8,000 \text{ m}^2 = 2,666.7 \text{ m}^2$$

A maximum of 2,666.7 m² can be included in the rating. As only 1,000 m² is medical space, no adjustment is required and the full 1,000 m² is included in the **rated area**.

Example 4: An office building has a total **NLA** of 1,000 m². Within this **NLA**, 400 m² is occupied by a physiotherapist's consulting rooms. Within the physiotherapist's tenancy, 120 m² is a publicly accessible waiting room and reception space.

Firstly, the area must be corrected for **public access spaces**. The net office **NLA** is calculated as:

$$1,000 \text{ m}^2 - 120 \text{ m}^2 = 880 \text{ m}^2$$

Therefore, the maximum **public access space** that can be included for this rating is calculated as follows:

$$\left(\frac{880 \text{ m}^2}{0.9} \right) - 880 \text{ m}^2 = 97.8 \text{ m}^2$$

The office **NLA** after correction for **public access spaces** is therefore:

$$1,000 \text{ m}^2 - 120 \text{ m}^2 + 97.8 \text{ m}^2 = 977.8 \text{ m}^2$$

Secondly, the area must be corrected for **medical office facilities** (excluding any spaces already included in the public access calculation). The net office **NLA** after correction for public spaces is calculated as:

$$977.8 \text{ m}^2 - 280 \text{ m}^2 = 697.8 \text{ m}^2$$

Therefore, the maximum **medical office facilities** that can be included is:

$$\left(\frac{697.8 \text{ m}^2}{0.75} \right) - 697.8 \text{ m}^2 = 232.6 \text{ m}^2$$

The **rated area** after corrections for both **public access spaces** and **medical office facilities** is therefore:

$$977.8 \text{ m}^2 - 280 \text{ m}^2 + 232.6 \text{ m}^2 = 930.4 \text{ m}^2$$

4.6.3.3 Whole Building and Tenancy ratings

Medical or **educational office facility** spaces must never be included in the calculation of **rated area** for the purpose of Whole Building and Tenancy. The benchmarks using for ratings were not developed with these types of facilities in mind.

4.7 Determining occupancy

4.7.1 General

After limiting the proportion of **public access spaces** and **medical** and **educational office facilities**, the **Assessor** must assess the number of occupation days and number of **fitout works** days during the **rating period**.

Occupation days and **fitout works** days are used as adjustment factors to calculate the **rated area** from the office **NLA**.

4.7.2 Occupation days

For Base Building ratings, the number of occupation days for each **functional space** is the number of days (including weekends and public holidays) the space was **ready for occupation**.

For Tenancy ratings, the number of occupation days for each **functional space** is the number of days (including weekends and public holidays) the space was actively used by the tenants as an **office**, including use as an **office support facility**.

For Whole Building ratings, the number of occupation days for each **functional space** is the number of days (including weekends and public holidays) the space was **ready for occupation** and actively used by the tenants, including use as an **office support facility**.

If a **functional space** has different occupation days for different areas, the **functional space** must be split so the occupation days can be entered separately.

 For documentation requirements, see Section 8.2.9.

4.7.3 Fitout works days

Where refurbishment or **fitout works** are taking place in a **functional space**, but the space does not meet the criteria for being **occupied** (as per Section 4.7.2 for each **rating scope**), up to 30 **fitout works** days can be entered for each **functional space**. The number of **fitout works** days for each **functional space** is the number of days where—

- a) the space was being refurbished or **fitout works** were being undertaken; and
- b) Base Building air conditioning services were required for that space.

If more than 30 days were used for **fitout works** for a particular **functional space**, 30 days should be entered as **fitout works** days and the remainder should be considered unoccupied.

Fitout works days do not include periods of work where the Base Building services were not required for that space. It does not include periods during which the building was under construction or being extensively renovated and was not suitable for normal occupation.

Any period during which it is not possible to clearly distinguish between **fitout works** and other construction activity must not be included. Similarly, if there is no evidence (as per Section 8.2.10) whether or not normal Base Building services were required by the occupiers during that period, then the **Assessor** must assume that the services were not required.

 For documentation requirements, see Section 8.2.10.

Note 1: For Whole Building ratings, the period for **fitout works** is discounted by 50 %. For Tenancy ratings, the period for **fitout works** is discounted by 100 % (no fitout days are accounted for). These adjustments are calculated automatically by the **NABERSNZ rating input form**, and the **Assessor** should simply enter the total number of fitout days.

Note 2: For a Base Building rating:

- a) Where a space was not being used as an **office** while **fitout works** were taking place, the hours of occupation are deemed to be the same as the **average** hours of occupation for that space for the **rating period**.
- b) Where a space was being used as an **office** during business hours and **fitout works** were taking place outside the normal business hours, then any additional hours (i.e. while the space was provided with Base Building services) should be added to the **rated hours** calculation. If there are different hours for different times of the year, these should be entered into the **NABERSNZ rating input form** separately according to Section 5.5. Please contact the **Administrator** for further information.

5 Rated hours

5.1 General

There are several factors which impact the consumption of energy and water in an assessment and therefore affect a NABERSNZ Energy and Water for Offices rating. The second of these factors is *hours*. The **rated hours** must be correctly determined to allow for fair comparison.

 For documentation requirements, see Section 8.3.

5.2 Process overview

Table 5.2 below outlines the process for calculating **rated hours** for Base Building, Whole Building and Tenancy ratings.

Table 5.2: Process for calculating rated hours for all rating scopes

Step		Reference
1	Use the breakdown of functional spaces within the rated premises	4.4
2	For each type of functional space , with the exception of computer server rooms and office support facilities , use one of the following methods in priority order below: 1. OTA Core Hours and AHAC 2. Tenancy Occupancy Survey 3. Default Core Hours 4. Average Core Hours	5.3.2 and 5.3.3 5.3.4 5.3.5 5.3.6
3	Determine hours for computer server rooms	5.3.7
4	Determine hours for office support facility spaces, including meeting rooms	5.3.8
5	Verify long hours if the rated hours for any functional space is greater than 60 hours per week	5.4
6	If the core hours vary over the rating period or during the week, enter them into the NABERSNZ rating input form accordingly	5.5

5.3 Determining rated hours

5.3.1 General

There are several methods for determining rated hours. The following sections must be used according to the order specified in Table 5.2 above.

5.3.2 OTA Core Hours

5.3.2.1 Owner/Tenant Agreement (OTA) Hours Method

The **OTA** Hours method can only be used if there are hours defined in the **OTA**. When **OTA** Hours are used, Core Hours are based on the hours mutually agreed upon in writing within the **OTA** by the building owner and the tenant for which the space will be **comfortable for office work**. The **OTA** should be able to be applied to the **rating period**.

The **OTA** may refer to another document, commonly known as the 'House Rules', which contains information about the Core Hours. Where this document is specifically referred to in the **OTA**, the information in it can be used by the **Assessor** to determine the Core Hours. If the 'House Rules' are not specifically referred to in the **OTA** they cannot be used. The requirements around language as outlined in the Sections below must still be followed.

 For documentation requirements, see Section 8.3.1.

Hours determined using the steps below are considered **acceptable data**.

Step 1: OTA Hours when they directly refer to 'comfort conditions'

The key question for an **Assessor** is whether the tenants have requested that the space be **comfortable for office work** during specific hours. This is not the same as the operating hours of the plant servicing the space as the plant requires start up time to provide comfort conditions to the space.

The **Assessor** must consider the current lease in relation to building hours as most leases contain specific clauses that describe the Lessor's obligations to the tenant. Such clauses are to be used to investigate whether the tenants have requested the space to be **comfortable for office work** or not.

The **Assessor** must identify and keep record of these specific clauses as evidence of the correct method being used for determining **OTA** hours.

If it is clear that the hours detailed in the **OTA** are the normal hours for which the space will be **comfortable for office work**, the **OTA** Hours must be used. The wording in the **OTA** must be interpreted carefully to distinguish between plant operation and comfort conditions within the space. Acceptable wording includes, but is not limited to—

- a) 'hours for which the space will be **comfortable for office work**';
- b) 'hours of occupation';
- c) 'hours of comfort conditions'; or
- d) 'hours for which a temperature range compatible with being **comfortable for office work** must be met'.

Example: The following would be acceptable wording.

Clause in lease:

The **Landlord** must use reasonable endeavours to ensure air-conditioning operates during **Building Hours** in accordance with the **Air-Conditioning Standards**.

Definitions in Appendix to lease:

- a) **Air-Conditioning Standards:** Maintenance of room temperature between 19°C to 24°C inclusive, where external ambient temperatures are between 5°C to 40°C inclusive.
- b) **Building Hours:** 8 am to 6 pm Monday to Friday excluding public holidays.

Wording that is not acceptable evidence on its own to demonstrate 'comfort conditions' includes, but is not limited to—

- 1) 'air conditioning hours' – these may be plant operating hours;
- 2) 'hours of access', 'building availability' or 'business hours' – these may be when security doors are open; or
- 3) 'hours of restricted access' – these may be when security doors are closed.

Assessors can seek to obtain a new or updated **OTA** with acceptable wording which accurately captures the hours for which the space is **comfortable for office work**. This may be done if the wording used in the **OTA** is not acceptable, or if the existing **OTA** does not accurately reflect the current situation.

If the wording in the most up to date **OTA** remains unacceptable, the **Assessor** must move on to *Step 2: OTA Hours and BMS data*. If the **OTA** wording clearly states plant running times, and no updated **OTA** is obtained, the **Assessor** must move straight on to *Step 3: OTA Hours minus two*.

Step 2: OTA Hours and BMS data

Building Management System (BMS) data demonstrating that the plant starts before the stated **OTA** Hours for the **rating period** can be used to clarify ambiguous wording within the **OTA**.

The **OTA** Hours can be used if it is verified that the plant starts up with enough time prior the start of **OTA** Hours to bring the space to comfort conditions. For example, if an **OTA** uses the words 'air conditioning hours' but the **Assessor** has independently verified that the air conditioning starts one to two hours before the **OTA** time every day, this would be sufficient to know that the words 'air conditioning hours' have been interpreted to mean 'hours of comfort'.

The **Assessor** must obtain additional evidence to determine the **OTA** Hours can be interpreted as 'hours of comfort' when the plant starts with a small start-up time before **OTA** Hours, for example 30 minutes prior.



For documentation requirements, see Section 8.3.1.

Example: The **OTA** refers to air conditioning hours from 8 am to 6 pm. It is unclear if this refers to comfort conditions or plant run times. The BMS shows that the plant starts at 7 am every weekday. As the hour between the plant start time and the **OTA** Hours is considered sufficient to achieve comfort conditions, the **OTA** Hours can be interpreted as hours for which comfort conditions are met.

Step 2 can only be used where wording in the **OTA** is ambiguous and/or does not specifically refer to plant running hours, and no new or updated **OTA** with acceptable wording has been obtained. Where there is insufficient evidence to demonstrate that the **OTA** Hours refer to comfort conditions, or where the BMS data demonstrates that the plant starts at the same time or after the **OTA** Hours, the **Assessor** must move on to *Step 3: OTA Hours minus two*.

Step 3: OTA Hours minus two

 The **NABERSNZ rating input form** will calculate Step 3 automatically based on the **Assessor's** selected evidence for core hours. **Assessors** should not perform this calculation prior to data entry.

Two (2) hours per day must be subtracted from the **OTA** Hours when—

- a) the **OTA** clearly refers to plant run times and no new or updated **OTA** with acceptable wording has been obtained; or
- b) wording in the **OTA** is unclear and there is no BMS data available, or the data within the BMS does not clearly demonstrate the intention of the **OTA** being comfort conditions.

Note: The two (2) hours per day is to account for plant start up time.

5.3.2.2 OTA Hours correction for Tenancy and Whole building ratings

 The **NABERSNZ rating input form** will apply this correction automatically for all ratings. **Assessors** should not perform this calculation prior to data entry.

Data collected by the **Administrator** indicate that rated hours determined by **OTA** are, on average, five hours longer than when determined through a **TOS**. To normalise **OTA** Hours and ensure all ratings are comparable, five (5) hours per week will be automatically deducted from the **OTA** Hours entered. This is in addition to the two (2) hour deduction outlined in Step 3 of 5.3.2.1, if relevant.

5.3.2.3 Conflicting information on Core Hours

Core Hours are the regular hours for which tenants have mutually agreed with the building owner that a space is **comfortable for office work**. The building owner is obligated to provide services during these hours.

However, if the owner knows that all the tenants have gone home by the end of the agreed hours, they might turn the air conditioning off early. This would present the **Assessor** with conflicting information on Core Hours, as in practice the air conditioning plant has shut down before the agreed end time stated in the **OTA**.

This is an effective strategy that should be recognised, as it is not efficient if the plant runs longer than required. Therefore, the Core Hours must remain as those stated in the **OTA**.

5.3.3 AHAC: after-hours air conditioning requests

5.3.3.1 Standard for acceptable data

After-hours air conditioning (AHAC) requests to service spaces outside Core Hours can be included in the calculation of **rated hours** for a **functional space** only if the **OTA** Hours method has been used to determine Core Hours of this space.

Acceptable data for AHAC requests includes—

- a) logs of AHAC requests by tenants, showing the date and time of each request and the **functional space** to which it is applied; and
- b) evidence of other AHAC requests, such as correspondence between the tenant and the owner or building manager or information written into the **OTA** which has been verified to be correct and up to date. This evidence must include the date, time and space to which AHAC has been agreed to be applied.

Air conditioning operation records that do not show the date, time and source of requests are not acceptable, even if supported by evidence of after-hours occupation of the space. Similarly, records which only show the total 'hours run' or 'after-hours run' for the air conditioning plant are not acceptable.

The determining factor is the tenant's request to the building owner for air conditioning services outside Core Hours.

 For documentation requirements, see Section 8.3.2.

5.3.3.2 Requests related to Core Hours comfort conditions

The **Assessor** must verify that AHAC requests do not overlap with the Core Hours. This includes any requests for service that occur in the normal 'start up' period for the plant or in the hour before the start of Core Hours.

AHAC requests must be reviewed by the **Assessor** to ensure that all **AHAC** in the hour before start-up are due to early occupancy rather than to comfort issues. This can be typically demonstrated by providing correspondence with the tenant. If the **Assessor** cannot accurately assess the duration of the start-up period for the plant to ensure that no AHAC hours have been double counted during this time, AHAC hours that are included in the entire hour before the start of Core Hours must be disregarded.

5.3.3.3 Maximum duration of individual requests

If a tenant's AHAC request or associated documentation does not include the duration for which a request was made, the maximum duration for each such request must be taken as one hour.

Similarly, if the standard run time per push-button activation is more than one hour and there is no evidence showing that the tenant requested that run time or agreed to it in an **OTA** with the building owner, the maximum duration for each such request must be taken as one hour.

Note: This is to limit possible overestimation of AHAC hours and to discourage excessive provision of AHAC in response to a single request when it has not been clearly required by the tenant.

5.3.3.4 Spaces that individual requests apply to

An individual AHAC request applies only to the **functional space** for which the request was made. If a single request results in AHAC being provided to multiple **functional spaces**, and the tenant has not specified which **functional space** they want to be serviced, then the request is taken to apply only to the smallest of the affected **functional spaces**. See the list of examples in Table 5.3.3.4 below:

Table 5.3.3.4: Examples of spaces that AHAC requests apply to

Example	Interpretation
A functional space that occupies 1 out of 25 floors or 5 % of the building requests AHAC, but 20 % of the building is operated to service this request	The request applies to the smallest affected space of the single floor (5 % of the building)
A tenant occupies a multi-tenanted floor and requests AHAC for the floor	The request applies only to the tenant's functional space on that floor
Push-button request for AHAC from a Tenancy that occupies 20 % of the building, with more than one functional space	The request applies only to the smallest functional space serviced by that push-button request

A push-button request cannot apply to more than one **functional space** unless written confirmation from the tenant is available that the request was for a larger number of spaces.

5.3.3.5 Requests serving different zones within a single functional space

When different independent requests are serving different smaller zones within a main **functional space**, each of these smaller zones must become their own **functional space**.

If the **Assessor** cannot obtain detailed areas for the zones served, a simple average calculation (arithmetical mean) must be used. See the examples listed in Table 5.3.3.5 below:

Table 5.3.3.5: Example of requests serving different zones

Example	Interpretation
Functional space of 1,000 m² comprising three AHAC zones, where the areas of the AHAC zone(s) are unknown. Total AHAC count for push-button 1: 100 hours Total AHAC count for push-button 2: 200 hours Total AHAC count for push-button 3: 300 hours	The AHAC hours for the functional space must be taken as: $= (100 + 200 + 300) \div 3$ $= 600 \div 3$ $= 200 \text{ hours}$

5.3.4 Tenant Occupancy Survey

5.3.4.1 General

An **Assessor** may use the **Tenant Occupancy Survey (TOS)** Core Hours and unusual hours method if a higher priority method for determining **rated hours** as detailed in Section 5.2 cannot be used.

A **TOS** cannot be used for:

- a) **Computer server rooms** not part of a larger **functional space** (refer to Section 5.3.7).
- b) **Meeting rooms** not part of a larger **functional space** (refer to Section 5.3.8).
- c) Any **office support facility** functional space that is significantly sized and is not usually **occupied**, for example a compactus room that occupies half a floor.

When **TOS** hours are used, hours are based on the hours confirmed by a person working in the **functional space** who has knowledge of when the space is typically at least 20 % **occupied**.

Note 1: Where a tenant has moved out during the **rating period** and the **Assessor** cannot obtain a **TOS** from the tenant, Assessor should use another method to determine core hours. If unsure, **Assessors** should contact the **Administrator** for further guidance.

Note 2: Where available, a lease or **OTA** should be prioritised for determining occupancy days of a functional space. Where a **TOS** is used for this purpose, **Assessors** should independently verify occupancy days.



For documentation requirements, see Section 8.3.3.

5.3.4.2 Standard for acceptable data

For each **functional space**, a **TOS** must be completed by a person who works in that space and has specific knowledge of the levels of occupancy for the space. The **TOS** template is provided in Appendix A.

Each survey should be completed by a different person as it is not expected that any one individual will know the hours of **functional spaces** on all floors. A **TOS** across multiple **functional spaces** completed by a single person is only acceptable where it is reasonable that the individual would be aware of the hours in those spaces. Otherwise, each **TOS** must be completed by a different person. Examples of what is considered reasonable are:

- a) Multiple small **functional spaces** on a single floor.
- b) One manager or supervisor covering three floors or less of Activity Based Working, where they work across all those floors on a regular basis.

A **TOS** must also be completed for the following:

- 1) Each shift where more than one shift is worked per **functional space**. For example, a 24-hour call centre is one **functional space** but would require a **TOS** for each shift.
- 2) Each distinct period where the hours of occupation or the numbers of shifts in a **functional space** changed during the **rating period**.

- 3) Each distinct period where the staffing in a **functional space** changed during the **rating period**. For example, where an individual is only able to provide information about occupation of a **functional space** for part of the **rating period**, a separate survey needs to be completed by individual(s) working in the **functional space** for the remaining parts of the **rating period**.

Note 1: Where multiple **TOSs** are completed for a single **functional space**, the **Assessor** should combine the results and enter it as a single row in the **NABERSNZ rating input form**. Where the Core Hours vary throughout the **rating period** or vary throughout the week, see Section 5.5.

A **TOS** is considered unusable if—

- i) the **TOS** does not verify that the respondent has adequate knowledge of the occupancy hours of the **functional space** for the specific dates entered in the **TOS** (Appendix A). This includes **TOS** completed by building or facility managers; or
- ii) the **TOS** has missing or ambiguous data. This includes **TOS** that do not have name, position or contact number of the person who provided the information, dates of validity of the survey or identification of the **functional space** clearly detailed.

The **Assessor** must ensure that the **TOS** respondent is an employee of the tenant. The respondent must also have detailed, direct knowledge of staff movements relating to when the occupancy of the **functional space** reaches 20 % occupancy levels, and not just the opening/closing hours or service hours of the **functional space**. The **Assessor** must also clearly document how and why they have this information.

Where there is uncertainty around whether a respondent is acceptable, please contact the **Administrator**.

Preference is given to a **TOS** directly completed and signed by the respondent during the **Assessor's** site visit. However, a **TOS** completed by the **Assessor** through a phone interview or via email, or by the site representative during a virtual site visit is also acceptable.

Note 2: Where a tenant claims a **TOS** cannot be produced due to security or safety concerns, a full explanation should be sought by the **Assessor** and confirmed as acceptable.

5.3.4.3 Unusual hours

Unusual hours from the **TOS** can only be used if the **TOS** method is used to determine Core Hours for the functional space. If Core Hours are determined using any other method, no unusual hours can be used.

AHAC cannot be used when using a **TOS**.

5.3.5 Default Core Hours

Default hours of 45 hours per week may be used for Base Building, Tenancy and Whole Building ratings if a higher priority method for determining **rated hours** as detailed in Section 5.2 cannot be used. Where the **Assessor** estimates less hours than this as Default Hours, the reasons for doing so must be documented for this estimate to be deemed acceptable.

AHAC or unusual hours must not be allocated to a **functional space** that uses default business hours.

Note: Using default hours does not add to the **potential error** of a rating.

 For documentation requirements, see Section 8.3.4.

5.3.6 Average Core Hours

5.3.6.1 General

An **Assessor** may estimate the Average Core Hours if a higher priority method for determining **rated hours** (as detailed in Section 5.2) cannot be used.

Core Hours estimated under this method are **acceptable estimates** and must be added to the **potential error** for hours.

After-hours air conditioning or unusual hours cannot be allocated to a **functional space** that uses the Average Core Hours method.

 For documentation requirements, see Section 8.3.5.

5.3.6.2 Standard for acceptable estimates

When Average Core Hours are used for a **functional space**, the **Assessor** can use the following methods to estimate **rated hours** in order of priority:

- Period-weighted Core Hours of the space where **acceptable data** is only available for some shifts or some periods of operation in the **rating period**.
- The average of the Core Hours of nearby **functional spaces** with similar uses and tenants, if **acceptable data** is available for these spaces.
- The average of the Core Hours for the remainder of **functional spaces** included in the rating, if **acceptable data** is available for these spaces.

Note: Where a space was not being used as an office while **fitout works** were taking place, the hours of occupation should be calculated using Method a) above. Additional evidence is not required for the calculation of these hours, and these hours should not be added to the **potential error**.

5.3.7 Computer server rooms

5.3.7.1 Base Building ratings

Where a **computer server room** has been separated into its own **functional space**, and **direct HVAC energy** is provided by the Base Building to the space, the **rated hours** are determined using the following methods in order of priority:

- Hours for which the Base Building provides **direct HVAC energy** to the space as confirmed by the **OTA**, BMS evidence or facility manager's written confirmation. This is **acceptable data**.

- b) Section 5.3.5 Default Core Hours.
- c) Section 5.3.6 Average Core Hours.

Where a **computer server room** has been separated into its own **functional space** and no **direct HVAC energy** is provided by the Base Building to the space, the area is excluded from the Base Building rating. See Section 4.5.4.

Where a **computer server room** has not been separated into its own **functional space**, the **rated hours** are the same as the **rated hours** for the adjoining **functional space**.

Note: While **Assessors** do not have to identify **computer server rooms** or separate them as **functional spaces** when their total measured area is less than 5 % of the floor plate **NLA**, the option remains to identify the **computer server room** as a separate **functional space** and allocate the hours as per the methods described above.

5.3.7.2 Whole Building and Tenancy ratings

The hours for a **computer server room** are the hours the ventilation or air conditioning is provided. No distinction is made between the provision of **direct HVAC energy** by either the Base Building or the Tenancy for this purpose.

Example: Documentation for a computer room indicates that:

- a) Base Building **direct HVAC energy** to the space from 7 am to 6 pm, five days a week; and
- b) A tenant supplementary unit is serving the space 24 hours, seven days a week.

The corresponding hours for the server room would be:

- 1) For a Base Building rating: 7 am to 6 pm, five days a week.
- 2) For a Whole Building or a Tenancy rating: 24 hours, seven days a week.

 For documentation requirements, see Section 8.3.6.

5.3.8 Other office support facilities

5.3.8.1 General

This Section applies to all **office support facilities**, including **meeting rooms**.

This Section does not apply to **computer server rooms** which is covered under Section 5.3.7.

 For documentation requirements, see Section 8.3.7.

5.3.8.2 Base Building ratings

Where an **office support facility** or **meeting room** has been separated into its own **functional space** and **direct HVAC energy** is provided by the Base Building to the space (see Section 4.5.5), the **rated hours** are determined using the following methods in order of preference:

- a) Section 5.3.2 Core Hours and Section 5.3.3 AHAC: after-hours air conditioning requests. This is **acceptable data**.
- b) Section 5.3.5 Default Core Hours. This is **acceptable data**.
- c) Section 5.3.6 Average Core Hours. This is added to the **potential error**.

Where an **office support facility** or **meeting room** has not been separated into its own **functional space**, the **rated hours** are the same as the **rated hours** for the **functional space** it is located within.

5.3.8.3 Tenancy and Whole Building ratings

Where an **office support facility** has been separated into its own **functional space**, the **rated hours** are determined using the following methods in order of priority:

- a) Hours derived from booking system records, if the **Assessor** has checked with the manager of the space that the records correspond to the actual occupancy of space. This method particularly applies to **meeting rooms** and is **acceptable data**.
- b) The area-weighted average of the Core Hours of all **functional spaces** which contribute to the usage of the office support space. This is **acceptable data**.
- c) Section 5.3.5 Default Core Hours. This is **acceptable data**.
- d) Section 5.3.6 Average Core Hours. This is added to the **potential error**.

Where an **office support facility** has not been separated into its own **functional space**, the **rated hours** are the same as the **rated hours** for the **functional space** it is located within.

5.4 Verifying long hours

5.4.1 General

If the **rated hours** for any **functional space** is equal to or greater than 60 hours a week, then the **Assessor** must verify these hours using the following procedures (Sections 5.4.2 and 5.4.3).

Note: The intent of verification of long hours is to ensure **rated hours** outside of the typical range (beyond 60 hours/week) are expected and reasonable for the space. It is to prevent situations where building services are being operated 'just in case' they are needed, or for a lease that is no longer appropriate for current conditions. For most ratings, verification should not be onerous but a matter of simply double-checking the hours determined are relevant for the space.

5.4.2 Procedure for verifying long OTA and AHAC hours

- a) The **Assessor** must determine if the hours are obviously as expected and reasonable for the space (see Section 5.4.4). If the hours are obviously as expected and reasonable, the hours are considered verified, and the **Assessor** must document the reasons for this decision.

- b) If the hours are not obviously as expected and/or reasonable, the **Assessor** must obtain evidence from the tenant of the relevant **functional space** that the **rated hours** are as expected and reasonable, and the reasons they are considered to be so. The documentation must be in writing and be signed by the manager or supervisor of the **functional space**.
- c) If the tenant does not agree that the hours are reasonable and expected, or cannot provide independent documentation of this, the **Assessor** must recalculate **rated hours** using a **TOS**. Where the survey hours are within 10 % of the **rated hours** originally calculated, the original **rated hours** are considered verified and must be used. Where the survey hours are not within 10 %, the lower hours value must be used.
- d) If the tenant cannot be contacted to verify the **rated hours**, an alternative method must be used. Contact the **Administrator** for approval of an alternative method.

 For documentation requirements, see Section 8.3.8.

5.4.3 Procedure for verifying long TOS hours

- a) The **Assessor** must determine if the hours are obviously as expected and reasonable for the space (see Section 5.4.4). If the hours are obviously as expected and reasonable, the hours are considered verified, and the **Assessor** must document the reasons for this decision.
- b) If the hours are not obviously as expected and/or reasonable, the **Assessor** must confirm the person surveyed has properly interpreted the **TOS** questions. This may be conducted at the time the **TOS** is completed.
- c) If the person surveyed does not confirm that all questions have been properly interpreted, a second **TOS** must be completed. This **TOS** may be completed by the same person once the **TOS** has been properly explained.

 For documentation requirements, see Section 8.3.9.

5.4.4 Checking expected hours

Assessors must complete a common-sense check to determine if the hours are 'obviously as expected and reasonable for the space'. For example:

- a) 24-hour service for a call centre operating three shifts is reasonable, but not for a call centre operating one or two shifts.
- b) 24-hour operation for a **computer server room** is reasonable.
- c) Core Hours of 60 per week plus an additional 20 AHAC hours requested by the floors as needed (such as by push-button requests) is reasonable and based on demand by the tenants.
- d) Core Hours of 60 per week plus an additional 20 AHAC hours requested using a long-standing order written at the start of the **OTA** three years ago may not be reasonable, if the recent occupancy of the space outside the Core Hours is low.

- e) Core Hours of 60 per week plus an additional 1,000 unusual hours per year based on a **TOS** for standard Tenancy might not be reasonable.

 For documentation requirements, see Section 8.3.10.

5.5 Entering Core Hours that vary

5.5.1 General

The Core Hours for a **functional space** may vary over the **rating period**. This may involve—

- a change in the Core Hours partway through the **rating period**; or
- different operating hours on different days.

This section outlines how to enter this data into the **NABERSNZ rating input form**.

 Data entry using methods other than those specified in this section may result in the **NABERSNZ rating input form** calculating **rated area** or rated hours incorrectly. Contact the **Administrator** if standard data entry methods are not possible for a **rated premises**.

5.5.2 Change in Core Hours over the rating period

Where the Core Hours for a space change partway through the rating period, the **Assessor** must enter the **functional space** on a new row in the **NABERSNZ rating input form** for each period that has different Core Hours. The 'Occupancy days per year' must reflect the number of days (inclusive of weekends and public holidays) that match each set of core hours.

Example: A call centre tenancy has **OTA** hours of 8 am to 6 pm weekdays at the beginning of the **rating period**. 10 weeks into the **rating period**, they extend their operating hours to 9 pm and obtain an updated **OTA** to reflect this. The call centre is entered into the **NABERSNZ rating input form** as follows:

Tenancy	NLA (m ²)	Occupancy (days/yr)	Occupied days per week	Start time (24hr)	End time (24hr)	Evidence for core hours	Unusual or AHAC hours (hrs/yr)
Call centre - office	542.00	70	5	08:00	18:00	OTA hours	0
Call centre - office	542.00	295	5	08:00	21:00	OTA hours	0

5.5.3 Change in Core Hours over the week

Some **functional spaces** may operate consistently for different hours on different days of the week. For example, a tenancy that operates for limited hours on Saturdays, or an office that starts an hour early on Mondays and Tuesdays.

The **Assessor** must identify a single common block of Core Hours and enter all other hours as Unusual or AHAC hours. Where these hours are documented in the **OTA**, the normal documentation requirements for AHAC hours in Section 8.3.2 do not apply. The **Assessor** must document their calculations for the additional hours.

Example 1: A tenant has an **OTA** that states the tenancy is at comfort conditions between 6 am and 6 pm weekdays, and 8 am to 12 pm on Saturdays. There is additional evidence for 50 AHAC hours throughout the **rating period**.

- a) *Weekly operation schedule:* The office operates as follows:
 - 1) 5 days per week (Monday to Friday): 06:00 – 18:00.
 - 2) 1 day per week (Saturday): 08:00 – 12:00.
 - 3) Total AHAC in rating period: 50 hours.
- b) *Identifying common core hours:* The **Assessor** decides to enter the Core Hours as 6 am to 6 pm for 5 days per week.
- c) *Calculating additional hours:* There are an additional 4 **OTA** hours each Saturday, so 4 hours/week × 52 weeks/year = 208 additional hours. Adding the documented 50 AHAC hours gives 258 hours.
- d) *Data entry:* The **Assessor** enters the scenario into the **NABERSNZ input rating form** as follows:

Tenancy	NLA (m ²)	Occupancy (days/yr)	Occupied days per week	Start time (24hr)	End time (24hr)	Evidence for core hours	Unusual or AHAC hours (hrs/yr)
Office space	700.00	365	5	06:00	18:00	OTA hours	258

- e) *Required evidence:* Because 208 hours entered under AHAC are documented in the **OTA**, no additional AHAC documentation is required for these hours. The **Assessor** documents their calculations for auditing purposes. They additionally retain AHAC hours evidence as per Section 8.3.2 for the remaining 50 hours.

Example 2: An office building is owner occupied. The **Assessor** obtains an email sent by the owner to the facility manager, stating that the air conditioning is required between 7 am and 5 pm on Mondays and Tuesdays, and between 8 am and 5 pm on Wednesdays, Thursdays and Fridays.

- a) *Weekly operation schedule:* The office operates as follows, noting that the ‘**OTA** hours minus two’ method must be used if no BMS data is available to clarify the wording in the **OTA**:

- 1) 2 days per week (Monday and Tuesday): 07:00 – 17:00.
 - 2) 3 days per week (Wednesday to Friday): 08:00 – 17:00.
- b) *Identifying common core hours:* The **Assessor** decides to enter the Core Hours as 8 am to 5 pm for 5 days per week.
 - c) *Calculating additional hours:* There is an additional **OTA** hour on Mondays and Tuesdays, so $1 \text{ hour/day} \times 2 \text{ days/week} \times 52 \text{ weeks/year} = 104 \text{ additional hours}$.
 - d) *Data entry:* The **Assessor** enters the scenario into the **NABERSNZ input rating form** as follows:

Tenancy	NLA (m ²)	Occupancy (days/yr)	Occupied days per week	Start time (24hr)	End time (24hr)	Evidence for core hours	Unusual or AHAC hours (hrs/yr)
Owner's office	1500.00	365	5	08:00	17:00	OTA hours minus two	104

- e) *Required evidence:* Because all hours entered under AHAC are documented in the **OTA**, no additional AHAC documentation is required. The **Assessor** documents their calculations for auditing purposes.

6 Counting computers

6.1 General

NABERSNZ Energy for Offices ratings for Tenancy and Whole Buildings are affected by the number of computers in regular use. Conducting a proper count is necessary to allow for fair comparison. This chapter sets out the requirements for conducting such a computer count.

 For documentation requirements, see Section 8.4.

6.2 Process overview

Table 6.2 below outlines the process for conducting a computer count.

Table 6.2: Process overview

Step		Reference
1	Use the breakdown of the rated premises into functional spaces	4.4
2	Determine which configurations of personal computer systems are present, complete and in regular use	6.3.2
3	Bear in mind acceptable standards for data and Agile and Activity Based Working environments in the space	6.3.3
4	Identify if any computer counts need to be estimated for inaccessible functional spaces	6.3.4
5	Decide which functional spaces will use a default count, and which will have computers counted	6.3.5
6	If it is not possible to conduct a count in a functional space where a count is required, then use the default count, or estimate the count for the space if an estimate is an acceptable value	6.3.4, 6.3.5

6.3 Counting computers

6.3.1 Computer count requirements

See Table 6.3.1 to determine for which types of office ratings a computer count is required.

Table 6.3.1: Office ratings requiring computer counts

Rating type and scope	Count of computers
NABERSNZ Energy for Offices Tenancy	Required
NABERSNZ Energy for Offices Base Building	Not required
NABERSNZ Energy for Offices Whole Building	Required
NABERSNZ Water for Offices	Not required

6.3.2 Principle and definitions

6.3.2.1 General

A computer is counted if it is a complete ‘personal computer system’ in regular use within a **functional space**.

‘Personal computer systems’ include networked ‘thin client’ systems used to provide access to software and services comparable to personal computers with autonomous processors and system memory.

No count can be made for servers and other equipment mounted in racks other than the number of personal computer systems in the installation, as identified by monitors in use. Larger stand-alone computer installations with no monitor can be counted as a single computer for each installation.

Only computers in **functional spaces** are counted.



For documentation requirements, see Section 8.4.1.

6.3.2.2 Personal computer system configurations

A ‘personal computer system’ consists of a ‘system unit’ and at least one screen and one keyboard. There are three basic types of ‘personal computer system’ in common use as per Table 6.3.2.2 below.

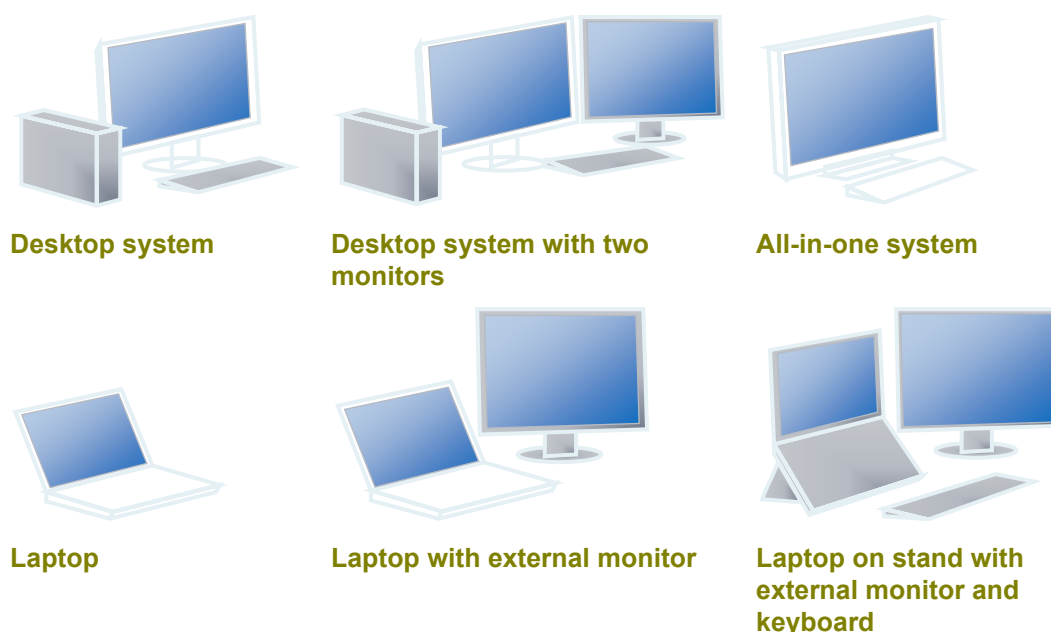
Table 6.3.2.2: Types of personal computer systems

Type of system	Description
Desktop system	A distinct system unit with an external monitor and external keyboard attached
Laptop (or notebook)	System unit, screen and keyboard in the one unit
All-in-one system	System unit and screen in one unit, but with an external keyboard attached

All of the configurations in Table 6.3.2.2 are equivalent and acceptable.

Adding additional monitors or keyboards to these basic configurations does not change the number of 'personal computer systems' involved. For example, a laptop with a separate monitor attached to it and/or a separate keyboard is still one personal computer system, as is a desktop computer with multiple monitors (see Figure 6.3.2.2).

Figure 6.3.2.2: Personal computer system configurations



Each of these configurations in Figure 6.3.2.2 is equivalent to one computer.

If there is any confusion as to how many computers are at a desk, then the number of monitors apparently set up for use is the defining factor. Monitors that are obviously not connected to a computer system must be disregarded.

6.3.2.3 Completeness

A personal computer system must not be counted if some components are missing (e.g. a desktop system unit with no monitor, a monitor with no system unit visible and no image on it, or a docking station with no laptop attached). If integral components are not present, it cannot be regarded as a complete system. Such incompleteness indicates a lack of regular use.

Seeing an image on a monitor is evidence that it is attached to a system unit – even if the unit is not visible. It is therefore considered to be complete, as the image is evidence of use.

6.3.2.4 Regular use

To be counted, a personal computer system must be in regular use in the **rated premises**. At least one of the following pieces of evidence of regular use must be present:

- a) a person using the computer system at the time of the count;

- b) indirect evidence that a person uses the system, even if they are not there at the time of the count. This may include personal effects or files and in-trays on the desk, or that the computer system is switched on;
- c) a report by a manager or other authoritative source that the system is in regular use; or
- d) for computers in training rooms, etc., booking or attendance records that the **Assessor** has verified are accurate and which show both the number of computers used and the amount of time they were used for.

A computer must **not** be counted if there is evidence that it is not in regular use. Such evidence includes the computer—

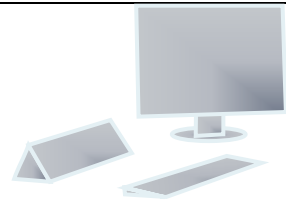
- 1) not being set up for use at a desk (e.g. it is in storage or packed up, or with cables not connected);
- 2) being obviously inoperable or too obsolete for productive use; or
- 3) being located or set up for occasional use only (in use of less than 50 % of the time), such as in a low-use training room for which there are no acceptable booking or attendance records, or a **computer server room**, boardroom, **meeting room** or store.

6.3.2.5 Examples of computer system configurations

Table 6.3.2.5 below specifies various computer system configurations and whether these can be counted.

Table 6.3.2.5: Examples of computer system configurations

Example	Count	Notes
A desk with one complete desktop computer or a laptop, with a person at the desk	1	One system with evidence of use – the person
A desk with one computer, with no person at the desk but with papers and in-trays as if it is normally occupied	1	One system with evidence of use – the papers and in-trays
A desk with one computer, with no person at the desk and with no papers and no obvious sign that it is being used	0	One system, but no evidence of regular use
The same desk as above, but with a report from the manager that the person is on leave	1	One system with evidence of use (the manager's report)
A desk with a laptop stand or docking station, but no laptop and no evidence of use	0	No complete system, and no evidence of regular use

		
A desk in use with a laptop and a stand or docking station, with a separate monitor and keyboard attached	1	One system with evidence of use
A desk with evidence of use, with a laptop stand with external monitor and keyboard attached, but no laptop	0	No complete system (the laptop may be counted elsewhere)
The same desk as above, but with a report from the manager saying the person is out of the office with the laptop	1	One system with evidence of use (the manager's report means the laptop will not be counted separately)
A desk in use with both a laptop and a desktop computer with monitor and keyboard	2	Two systems with evidence of use
A desk in use with one computer (or laptop), and two monitors used	1	One system with evidence of use
A desk with no computer visible, with two monitors being used: 	2	Two systems (two monitors, no other data) with evidence of use
Eight desks in a training room used no more than two days a week, each with one computer	0	These systems are in used less than 50 % of the time and are therefore considered not in regular use

6.3.3 Conducting a count

6.3.3.1 Standard for acceptable data

The number of computers must be based on an actual site count of computers in each **functional space**. Asset inventory information is not acceptable because it does not differentiate low-use machines and may include old machines no longer in use or on site. Local server counts of computers online at any point in time are not acceptable.

Where **acceptable data** or **acceptable estimates** of the energy consumption for that **functional space** is not available for reasons beyond the control of the **Assessor** or customer, then computers in the **functional space** must not be counted.

 For documentation requirements, see Section 8.4.2.

6.3.3.2 Agile and Activity Based Working

Agile and Activity Based Working (ABW) are spaces which typically include a variety of office environments to support different activities in the workplace. ABW spaces typically do not have set desks for workers.

Conducting computer counts in a **functional space** using ABW should be carried out following the same principles outlined above (see Section 6.3.2).

When counting in **functional spaces** which are operating using agile and ABW principles, NABERSNZ recommends conducting computer counts between 09:30 and 12:00, or between 14:00 and 16:30 to ensure an appropriate representation of the number of computers used on-site is obtained.

Computer counts taken at the very start or end of the day, or during lunch hours, may give a lower result than during the premises' typical occupancy, which could impact the rating's result.

In addition, work points outside of traditional **NLA** areas – such as in a café or foyer – may be included in the computer count so long as the computers are still on the premises.

Due to the nature of ABW spaces, it is likely to be more difficult to identify regular use of a computer system (e.g. the absence of personal affects or files at a desk might not equate to non-use). The emphasis around portability in ABW adds to this difficulty. It is important therefore that **Assessors** use their discretion in determining the occupancy of those **functional spaces** through additional means such as asking the tenant about typical occupancy rates on a standard workday and reviewing work points which are highly frequented.

6.3.4 Estimating numbers of computers

If an **Assessor** cannot access a space to physically count all the computers in a **functional space**, then the **Assessor** may discount or estimate the number of computers for that **functional space**. It is acceptable to ask staff familiar with the space, or to estimate the number of computers based on **average** computer densities for nearby similar spaces.

This Section does not apply to unoccupied spaces. If a **functional space** is unoccupied at the time of the count and there is no acceptable evidence of the number, completeness or regular use of computers, then the default computer count method must be used (see Section 6.3.5).

Computer count estimates add to the **potential error** for computers.

 For documentation requirements, see Section 8.4.3.

6.3.5 Default computer count

An **Assessor** may use a default computer count of one computer per 20 m² of **rated area**. This does not add to the **potential error** of the rating.

The default count can be used in place of an actual count, including when access to a **functional space** is limited, or for spaces that were **occupied** during the **rating period** but unoccupied during the computer count.

The default count must not be applied to **functional spaces** where computers would be located or set up for occasional use only (in use of less than 50 % of the time), such as low-use training rooms, **computer server rooms**, boardrooms, **meeting rooms** or stores.

 For documentation requirements, see Section 8.4.4.

7 Minimum energy and water coverage

7.1 General

Assessors will need to determine the energy and water a building uses for a NABERSNZ rating. This must be done in compliance with Chapter 4 of *NABERSNZ The Rules – Metering and Consumption* as well as this chapter.

This chapter summarises the minimum energy and water coverage for NABERSNZ Office ratings which must be considered in these calculations.

For rating mixed use buildings, **Assessors** should also consult the *NABERS Ruling – Shared Services & Facilities* for details on methods for apportioning shared services and common facilities between the building uses.

 For documentation requirements, see Section 8.5 and *NABERSNZ The Rules – Metering and Consumption*.

7.2 Minimum energy coverage

7.2.1 General

Assessors must ensure that all the required energy **end uses** as listed in this chapter are covered by the sources and supply points identified in accordance with Sections 4.2 and 4.3 of *NABERSNZ The Rules – Metering and Consumption*.

If an **end use** is required to be included in the rating but is not covered by one of the supply points identified, then the **Assessor** must use one of the alternative allowable methods listed in Chapter 8 of *NABERSNZ The Rules – Metering and Consumption* to ensure the minimum energy coverage requirements can be met.

Note: Alternative allowable methods include small **end use** estimations and, for exclusions, use of financially reconciled utility costs and area weighting. See Section 8.2 of *NABERSNZ The Rules – Metering and Consumption*.

 For documentation requirements, see Section 8.5.1.

7.2.2 Base Building ratings

The required minimum energy coverage for Base Building ratings is energy consumed in supplying building central services to office lettable and common spaces during the **rating period**. This energy coverage includes:

- a) Common-area lighting and power (e.g. lifts, lobbies, foyers, plant rooms and common-area toilets).
- b) Lifts and escalators.
- c) Air conditioning and ventilation, including:
 - 1) Base Building services to meet normal requirements.
 - 2) Centralised supplementary services provided for tenants (such as supplementary tenant condenser water loops), see Section 7.3.2.
 - 3) Supplementary services provided to ensure the premises are safe, lit and **comfortable for office work**, where there is no **special tenant requirement**.
- d) Exterior lighting.
- e) Generator fuel where it serves central services, including for fire suppression systems.
- f) Car park ventilation and lighting, where internal or external car parks within the legal boundaries of the site are provided for tenant use.
- g) Exterior signage that—
 - 1) is primarily used for identifying or advertising the building owners; or
 - 2) displays the building name, even if unrelated to a tenant or building owner; or
 - 3) is provided to a tenant by the building owner as a condition of lease.
- h) Sump pits and hydraulic pumping which serves the building.

7.2.3 Tenancy ratings

The required minimum energy coverage for Tenancy ratings is energy consumed by the occupant in the Tenancy to be rated during the **rating period**. This energy coverage includes:

- a) Lighting.
- b) Power to equipment (including computer servers and tenant-installed signage within the building).
- c) Tenant-controlled supplementary air conditioning to meet a **special tenant requirement**.
- d) Generator fuel for tenant usage.
- e) External signage for a tenant not provided by the building owner as a condition of the lease.

7.2.4 Whole Building ratings

The required minimum energy coverage for Whole Building ratings is all energy used by office tenancies and by Base Building services to lettable office and common spaces during the **rating period**.

7.2.5 Unoccupied spaces

The energy use (within the scope of the required minimum energy coverage of the rating) of unoccupied office spaces must always be included, even though the space may have been excluded from or discounted in the **rated area** calculation.

7.2.6 Exclusions

7.2.6.1 General

Energy use may only be excluded from a rating if—

- a) the energy is not part of the minimum energy coverage of the rating;
- b) there is a methodology within the **Rules** that permits the exclusion; and
- c) the coverage, accuracy and **validation** requirements for the metering of the exclusion are met.

The metering for any exclusion must not include any **end uses** that are required under the minimum energy coverage.

7.2.6.2 Electric vehicle charging points

The energy associated with electric vehicle charge points does not form part of the minimum energy coverage and is not required to be included. Emissions associated with moving vehicles are not included in the scope of ratings.

7.2.6.3 Transmission towers

The energy used by antennas/transmission towers that provide service to the locality/suburb are not part of the energy coverage. Typically, this would be where a building leases roof space to a telecommunications company to operate their telecommunications equipment for servicing of the locale.

7.2.6.4 Computer server rooms and data centres

See Section 4.5.4 for more information on how to exclude the energy for these spaces.

7.3 Energy end uses requiring additional consideration

7.3.1 Computer server room energy coverage

7.3.1.1 Base Building ratings

Where the area of a **computer server rooms** has been excluded in line with Section 4.5.4.2, the energy associated with providing central services to this area must also be excluded from the rating if adequately sub-metered or thermally metered.

For situations where HVAC services are provided centrally, thermal metering may be required to determine the proportion of energy use. In these situations, the standard methodology given in *NABERSNZ The Rules – Thermal Energy Systems* must be used.

7.3.1.2 Tenancy and Whole Building ratings

The energy consumption of a **computer server room** may be partially or wholly excluded from Tenancy and Whole Building ratings¹ on the grounds of external usage of the equipment. However, the same methods and criteria as those used to exclude the floor area of the same **computer server room** from the **rated area** calculation under Section 4.5.4 must be used.

Specifically, the following rules apply:

- a) If the floor area of the **computer server room** has been **completely included** in the calculation of the **rated area**, then the energy consumption must be **completely included** in the assessment.
- b) If the floor area of the **computer server room** has been **completely excluded** from the calculation of the **rated area**, then the energy consumption must be **completely excluded** from the assessment.
- c) If the floor area of the **computer server room** has been **partially excluded** from the calculation of the **rated area**, where the externally used IT equipment and/or facility services² are separately sub-metered, then the measured energy consumption of the externally used IT equipment and/or facility services must be **excluded** from the assessment.
- d) If the floor area of the **computer server room** has been **proportionately excluded** from the calculation of the **rated area**, where—
 - 1) the externally used IT equipment and/or facility services are **not** separately sub-metered, but
 - 2) it is possible to determine the number of **external users** of the IT equipment, then the energy consumption of the IT equipment and/or facility services must be **excluded** from the assessment **in the same proportion** as the floor area exclusion.

Example: If the energy consumption over 12 months of a **computer server room** is 25 megawatt hours (MWh) and there are 100 internal users and 400 **external users**, the energy consumption for the **external users** is calculated as:

$$25 \times \frac{400}{400 + 100} = 20 \text{ MWh}$$

The documentation required for energy consumption exclusions for **computer server rooms** is the same as the documentation required for exclusions from the **rated area** calculation under Section 4.5.4.3.



For documentation requirements, see Section 8.5.2.

¹ If the consumption of IT equipment and/or facility services to the space are separately metered.

² Facility services include lighting, power, UPS, air conditioning and dehumidification.

7.3.2 Energy use allocations for services

7.3.2.1 General

Energy used to provide services to office tenants, other than tenant lighting and power, must be allocated according to the requirements of this Section.

7.3.2.2 Supplementary air conditioning in open plan and cell office spaces

Energy used for supplementary air conditioning services to open plan or cell office spaces in office tenancies (including any space with one or more desks/workstations for normal use, or associated circulation spaces) is allocated to the Base Building. If a **special tenant requirement** exists however, it is allocated to the Tenancy.

To determine whether or not a **special tenant requirement** exists, the **Assessor** must conduct site inspections or obtain documentary evidence to establish that an unusual usage of the space has resulted in an increased intensity of the service required.



For documentation requirements, see Section 8.5.3.

The following procedure in Table 7.3.2.2 may be used to determine the allocation of supplementary air conditioning in open plan and cell office spaces:

Table 7.3.2.2: Procedure for allocating supplementary air conditioning

Step	Procedure
1	Check whether the supplementary air conditioning equipment is operated intermittently in response to a tenant-specific requirement, rather than continuously while the space is occupied. If it is operated intermittently in response to a tenant-specific requirement, the energy used for the equipment is allocated to the tenant. If not, go to Step 2. Note 1: A special tenant requirement may result from overloading due to unusually dense occupation or intense energy use in the space.
2	Check whether the need for supplementary air conditioning equipment is localised to the Tenancy. If supplementary air conditioning equipment is common in spaces elsewhere in the building without a special tenant requirement, the energy used for the equipment in question is allocated to the Base Building. If there are other spaces in the building with similar usage but which do not have supplementary air conditioning equipment, or if a comparison is inconclusive or not possible, go to Step 3. Note 2: A special tenant requirement will be limited to spaces where the tenant's unusual usage has resulted in an increased intensity of service required.

3	Check the current tenant load conditions in the space against documented specifications for the Base Building system to determine whether the tenant's unusual usage of the space is outside the system's intended conditions and performance. (For example, a consultant's 'Building performance criteria' document, or information provided to assess the grade of building in terms of the PCA building quality matrix could be used.) If the conditions in the space are clearly based on an unusual usage of the space that is outside that intended, the equipment's energy use is allocated to the Tenant. If not, or if there is no documented specification, go to Step 4. Note 3: A check against specifications may show that the tenant's unusual usage of the space has resulted in an increased intensity of service that is higher than the Base Building system was intended to accommodate.
4	The energy used by the supplementary air conditioning equipment must be allocated to the Base Building. Where it is not possible to include all the energy used by the supplementary air conditioning equipment in a Base Building rating, because it is not connected to a Base Building board or separately metered, then the space serviced by this equipment must be excluded from the rated area calculation. See Section 4.4.2. Note 4: The energy used for Base Building services (such as central chilled water) to spaces serviced by supplementary air conditioning equipment must always be included in the Base Building energy coverage, whether or not the floor area is included in the rated area calculation.

7.3.2.3 Energy use allocations for other services

Energy used to provide services to office tenants, other than supplementary air conditioning in open plan and cell office spaces, must be allocated according to the following requirements in Table 7.3.2.3A and Table 7.3.2.3B. The energy requirements apply in the order they are listed. Examples of energy use allocations are given in Table 7.3.2.3C.

Table 7.3.2.3A: Requirements for Tenant allocations

Requirement	Tenant allocations
T1	[Note: Energy used for the following is always allocated to tenants and must be excluded from an assessment for a Base Building rating.] Supplementary air conditioning equipment installed to meet a special tenant requirement in office support facilities. Examples might include packaged air conditioners (water or air cooled) in meeting rooms, tea rooms, computer server rooms or tenant-only cafés.
T2	Tenant cooling tower(s) and associated pumps that do not service the Base Building and are separately metered.

T3	Stand-alone domestic hot water units in tenant-only kitchens, tea rooms or toilets, unless accessible from a common space or car park without passing through NLA .
T4	Any other system which serves the rated premises and is not specifically allocated to the Base Building through the requirements listed under <i>Base Building allocations</i> in Table 7.3.2.3B below.

Table 7.3.2.3B: Requirements for Base Building allocations

Requirement	Base Building allocations
	[Note: Energy used for the following, when associated with offices rather than other uses, is always allocated to the Base Building and must be excluded from an assessment for a Tenancy rating.]
B1	Components added or changed to reconfigure the Base Building air conditioning system for office fitout requirements (for example, reheats and other additional terminal components).
B2	Centrally provided services that are— a) sized and located to provide a generic service for occupant end uses in different parts of the building, rather than a custom service for a designated set of applications, and b) accessible (whether or not they are used) to at least 30 % of the office tenants in the building or 30 % of the office NLA. Example: a) Supplementary tenant condenser water, and chilled and heating water. b) Supplementary outdoor air, tempered or otherwise. c) Domestic hot water.
B3	Services whose main characteristics (e.g. temperature, speed or flow volume) are managed by a Base Building control system (other than a master switch for enabling or disabling the service overall).
B4	Services to— a) non-NLA spaces such as lifts, lobbies, common area amenities and foyers; and b) any amenities space (e.g. a shower or toilet block) that is accessible from a common space or car park without passing through NLA, whether the amenities space is being used by a single tenant or otherwise.

Table 7.3.2.3C: Examples of energy use allocations

Example	Allocation	Reasons
Supplementary chilled water loop with blanked or in-use connection on each floor (i.e. more than 30 % of the floor area) serving a range of fan coils throughout the building	Base Building	Requirement B2
Supplementary condenser or chilled water application designed specifically to service a computer server room for a single tenant, not generally available to other tenancies	Tenant	Requirements T1 and B2
Supplementary chiller and associated equipment (e.g. pumps and cooling towers) sized to serve a set of fan coils and computer cooling room units affecting less than 30 % of the tenants or total office NLA , without blanked connections available to other applications	Tenant	Requirements T1 and B2
Packaged air conditioners under Base Building control	Base Building unless T1 applies	Requirements T1 and B3
Air conditioning services to meeting rooms , operating from the primary Base Building air conditioning system	Base Building	Requirement B1
Outdoor compressor unit for an air-cooled package unit that is allocated to the Tenancy under T1	Tenant	Requirement T1
Separate supplementary air conditioning for a leased café that is exclusively for the use of office tenants	Tenant	Requirement T1
A lift that connects areas leased by a tenant, installed in addition to existing Base Building lifts, and serving less than 30 % of the total office NLA	Tenant	Requirements T4 and B2
Domestic hot water serving common areas and some tenant-specific applications	Base Building	Requirement B2
Hot water for a shower block wholly within a single tenant's leased space, with no access from common areas, and under tenant control	Tenant	Requirements T3 and B1

7.3.3 Energy consumption in excluded spaces

7.3.3.1 Spaces for the exclusive use of tenants

Any space that is for the **exclusive use of office tenants** is considered part of the office **rated premises**. The energy used in these spaces must be included if it is in the **rating scope** (e.g. a Tenancy or Whole Building rating). This is the case regardless of whether that space is included or excluded from the **rated area** calculation.

7.3.3.2 Other spaces

Energy use associated with other spaces which are—

- a) *not* for the **exclusive use of office tenants**; and
- b) *not* included in the **rated area** calculation,

may be excluded from energy coverage where all of the following conditions are met:

- 1) The energy consumption is not included in the minimum energy coverage for this type of rating.
- 2) The energy consumption is properly metered, and the metering meets the requirements of *NABERSNZ The Rules – Metering and Consumption*.
- 3) The exclusions meet the requirements of *NABERSNZ The Rules – Metering and Consumption* or, for thermal exclusions only, the *NABERS The Rules – Thermal Energy Systems*.



For documentation requirements, see Section 8.5.4.

7.3.4 Car parks

7.3.4.1 General

Car parks (including parking for motorcycles) are only considered for Base Building and Whole Building ratings, not for Tenancy ratings.

For Base Building and Whole Building ratings, the energy use of lighting and ventilation for the following types of car park spaces within the **rated premises** must be included:

- a) Parking spaces provided exclusively to office tenants and their visitors as a benefit of their Tenancy (e.g. as part of an agreement associated with a lease).
- b) Parking spaces allocated for base building operations (e.g. contractors).

These apply whether the energy use is separately metered or not.

It is not uncommon for car park metering to also include other basement services such as hydraulic pumping. In such cases, proportioning of consumption data, as outlined in this section, is not permitted.

Note: Where parking is provided to a tenant as a result of a separate agreement (e.g. a standard contract with a public car park operator that is independent of building ownership and management) then it is not a benefit of the Tenancy and is not included.

7.3.4.2 Complete exclusion

The energy use of lighting and ventilation in car parks provided for office use may be **completely excluded** from the rating where—

- a) the car park is not located on the site of the **rated premises**; or
- b) both—
 - 1) the ownership and management of the car park are independent of the ownership and management of the **rated premises**; and
 - 2) there is a separate meter (or group of meters) that covers the entire energy use associated with the car park but does not cover any other aspect of the building's central services energy use that must be included in the assessment.

Note: No complete exclusion applies based solely on the grounds that the car park is leased to, or otherwise operated by, a manager separate from the building owner and building facilities manager. The car park can, however, be excluded if tenants do not have access to the car park, in accordance with the following Section 7.3.4.3.

7.3.4.3 Proportional exclusion of energy use

Where building office tenants do not have use of all of the building's car park, then a proportion of the energy use associated with the non-office tenant car parking spaces may be excluded from the rating in accordance with the following:

- a) Proportional exclusion of car park energy use is only permitted where there is a separate meter (or group of meters) that covers the entire energy use associated with the car park but does not cover any other aspect of the building's central services energy use that must be included in the assessment.
- b) Where lease documents explicitly assign a proportion of the measured car park energy use to the office tenants, then the share(s) specified in the documentation must be used in the assessment.
- c) If no specific allocation of the energy use is given to office tenant(s) in lease documentation, the relevant proportion is calculated by dividing the number of parking spaces allocated to office tenants by the total number of parking spaces.

Where pass cards or keys have been issued to office tenants, the number of parking spaces allocated to office tenants is the greater of—

- 1) the number of physically dedicated parking spaces; and
- 2) the number of pass cards or keys issued (to a limit of the total number of parking spaces).

Dedicated parking space, pass or key allocation data must be sourced from the lease documentation.

- d) If there is no lease documentation available, then it is acceptable to determine the proportions by obtaining documentation signed by office tenants that identifies the proportion of allocation.

- e) If there is no documentation and office tenants are unable to identify proportions, then all of the energy use associated with the car park must be included in the assessment.
- f) Regardless of the method used to proportion the energy use, the maximum that can be excluded is 100 % of the measured car park energy usage.

The **Assessor** must fully document both the method and all data used to proportion car park energy usage.

Where car parks are solely associated with education and medical office tenants, the following applies:

- 1) For Base Building ratings, the energy consumption for these spaces must be included in the rating, even where some of the area has not been included in the rating.
- 2) For Whole Building ratings, these spaces can be considered as 'non-office' tenants and the energy can be excluded, provided the requirements listed above in a) to f) are met.

Note: Where no spaces are provided to office tenants as a benefit of their Tenancy and there is no car park energy use assigned to the Base Building in lease documentation then the proportion that can be excluded is 100 %.

7.3.4.4 Standard for acceptable data

Compliance with this Section on car parks is deemed to satisfy the accuracy requirements of Section 3.4.



For documentation requirements, see Section 8.5.5.

7.4 Minimum water coverage

7.4.1 General

Once the water sources and their supply points have been determined, **Assessors** must ensure that all the required water **end uses** as listed in this chapter are covered.

If an **end use** is required to be included in the rating but is not covered by one of the supply points identified, then the **Assessor** must use one of the alternative allowable methods listed in Chapter 8 of *NABERSNZ The Rules – Metering and Consumption* to ensure the minimum water coverage requirements can be met.



For documentation requirements, see Section 8.5.6.

7.4.2 Water ratings

The required minimum water coverage is all the water uses within the building used to support the office during the **rating period**. This includes water use in:

- a) Taps and sinks.

- b) Air conditioning and other Base Building services (for example, general cleaning, façade cleaning, etc.).
- c) All services supplied exclusively to office occupants, such as showers, swimming pools, etc.
- d) Fire services, in accordance with Section 7.4.4.
- e) Water features and irrigation associated with the office building (including areas outside the building not considered **NLA**, but within site boundaries), unless primarily associated with non-office facilities such as retail spaces.
- f) Toilets and washing facilities serving office areas.

7.4.3 Water consumption in excluded spaces

7.4.3.1 Spaces for the exclusive use of tenants

Any space for the **exclusive use of office tenants** is considered part of the office **rated premises**, and the water used in any such spaces must be included in the rating. This rule applies regardless of whether that space is included in or excluded from the **rated area** calculation.

7.4.3.2 Other spaces

Water use associated with spaces that are—

- a) *not* for the **exclusive use of office tenants**; and
- b) *not* included in the **rated area** calculation,

may be excluded from water coverage under the following conditions:

- 1) The water consumption is not included in the minimum water coverage; and
- 2) The water consumption is properly metered and meets the requirements of *NABERSNZ The Rules – Metering and Consumption* as appropriate.

7.4.3.3 Unoccupied spaces

The water use (within the scope of the required minimum water coverage of the rating) of unoccupied office spaces must always be included, even though the space may have been excluded from or discounted in the **rated area** calculation.

7.4.4 Fire system water consumption

Water consumption from the operation of a building's fire system, whether consumed in an emergency or during testing, is considered a cost of operating a building and must be included in the calculation of water consumption if it is metered. If it is not metered, fire system consumption need not be included.

Note: Metered fire system consumption that is re-used within the building will tend to improve the rating.

7.4.5 Exclusions

Water use may only be excluded from a rating if—

- a) the water is not part of the minimum required water coverage of the rating;
- b) there is a methodology within the **Rules** that permits the exclusion; and
- c) the coverage, accuracy and **validation** requirements for the metering of the exclusion are met.

The metering for any exclusion must not include any **end uses** that are required under the minimum water coverage.

8 Documentation required for accredited ratings

8.1 General

The **Assessor** must keep all records on which an assessment is based, including any specific guidance or approvals given by the **Administrator**. Data retained for audit must be in a form which facilitates reviews and makes anomalies easily apparent.

Access to original documents is preferred if they are available. Copies of original documents may be used as evidence as long as the **Assessor** is satisfied that they are, or can be verified to be, true and complete records of the original documents or files.

Information may be contained in many different formats. The purpose of the documentation is to provide an acceptable, credible source of the required information. In some instances, specific document types may be unnecessary for an individual rating. However, under different rating circumstances, the specific document types may carry multiple items of information required for the rating. The qualifying factor is not the type of document but that the documentation contains the required information in an acceptable format.

The information in Sections 8.2 to 8.5 is required for a rating. It is organised based on the divisions of previous chapters – see Chapter 4 to Chapter 7. All the required information should be obtained from the owner/manager of the premises before a site visit, and then confirmed during the site visit and subsequent assessment. An on-site inspection helps to verify that the information provided is accurate, current and complete.

Individual ratings may require additional information or documentation depending on the individual circumstances of the **rated premises**.

Documentation requirements from *NABERSNZ The Rules — Metering and Consumption* apply in addition to those set out below.

8.2 Documentation required for Chapter 4: Rated area

Topic	Requirements	Documentation
8.2.1 Office NLA	Section 4.3	To confirm and validate the office NLA, the following is required, in order of preference: - Surveys. - Leases (including information about Tenancy types, hours of operation and subsequent negotiations and changes). - Other third-party documentation. - Direct measurement from drawings, plans or prints. - Site measurement verified by the Assessor identifying the rated premises. All of the documentation listed above must be made to/based on the measurement standard for rated area. Any alterations from the survey information found during the site inspection must be marked up on the survey plans or drawings, or clearly documented in the Assessor's notes.
8.2.2 Functional space	Section 4.4	To confirm the division of office NLA into functional spaces, the following is required: - A complete list of functional spaces identified by the Assessor, including details of— - each individual and distinct Tenancy; - all spaces with different AHAC zones or operating hours; and office support facilities. - Measurements and calculations for the functional spaces and the method of measurement employed in these determinations. For example, measurement standard for rated area. - Any documentation relating to significant construction activity during the rating period.

Topic	Requirements	Documentation
		d) Evidence of any smaller divisions of spaces made by the Assessor in order to improve the rating accuracy.
8.2.3 Exclusions	Section 4.5.1	For an excluded functional space , all of the following is required: a) Written information and/or Assessor's notes relating to the usage of spaces and the services provided to them. b) The grounds for their exclusion from the rated area calculation. c) Documentation regarding the area to be excluded from rated area calculation.
	Section 4.5.2	The following documentation must be provided for any office areas that have been subject to commercial negotiation: a) Evidence of commercial negotiation between owners and tenants regarding those areas. b) Evidence regarding the nature of the use of those areas and whether they should be included or excluded from the rating.
	Section 4.5.3	A list of all areas which are not usually considered as office space must be retained. The following documentation must be provided for including or excluding any of these areas, as applicable: a) Whether the space accommodated an office or office support facility. b) Whether the space was occupied for any part of the rating period. c) Whether the space is fit for office use.

Topic	Requirements	Documentation
8.2.4 Computer server rooms	Section 4.5.4.2	For the exclusion of computer server rooms from Base Building ratings, the following must be retained: a) Location of the computer server room. b) Details of air conditioning arrangements. c) Documentation regarding the area to be excluded from rated area calculation. d) Energy and water usage for the area to be excluded (if metering permits). e) Any thermal energy to be excluded from the rating (if metering permits).
	Section 4.5.4.3	For the exclusion of computer server rooms from Tenancy and Whole Building ratings, the following must be retained: a) Written documentation from the tenant that confirms that the computer server room is either used entirely for external users or as a disaster recovery site for another external data centre; or b) Written documentation from the tenant that confirms that the IT equipment in the excluded area is either used entirely for external users or as a disaster recovery site for another external data centre; or c) Credible written documentation provided by the tenant, completed and signed by an appropriate person, that either: 1) states the number of external users of the computer server room; or 2) contains records which allow the Assessor to accurately calculate (not estimate) the number of external users.
8.2.5 Data centres	Section 4.5.4.4	For data centres , the following documentation is required: a) Fitout drawings that show the size of the data centre or lease plans/drawings that clearly define the area of the data centre; and

Topic	Requirements	Documentation
		b) A list of active users identified as either internal users or external users. A signed letter from the data centre confirming the percentage of external users is also permissible. Assessors are required to sight and obtain copies of the kinds of documentation listed above to demonstrate the data centre meets the criteria to qualify as a data centre.
8.2.6 Other exclusions	Section 4.5.5	The documentation required for the exclusion of other office support facilities (not classified as computer server rooms or data centres) is as follows: a) For Base Building ratings: 1) Location of the meeting room. 2) Details of air conditioning arrangements. 3) Documentation regarding the area to be excluded from rated area calculation. 4) Energy and water usage for the area to be excluded (if metering permits). 5) Any thermal energy to be excluded from the rating (if metering permits). b) For Tenancy and Whole Building ratings: documentation of the floor area.
	Section 4.5.6	Where either a whole or a part of a functional space is excluded, full documentation in relation to the space must be retained. Detailed reason(s) why acceptable consumption data or estimates were not available for the rating period must also be given. If a space is being excluded due to owner or tenant refusal to provide data, the Assessor must retain— a) evidence of the refusal; or b) evidence of repeated unsuccessful efforts to contact the owner or tenant via phone and/or email, with at least 2 weeks given for a response.

Topic	Requirements	Documentation
8.2.7 Limiting public access spaces	Section 4.6.2	Documentation such as measurements and calculations must be retained of the floor area of the public access spaces. The Assessor must report if such spaces comprise more than 10 % of the office NLA and, if so, what proportion cannot be included in the rating.
8.2.8 Limiting medical and educational office facilities	Section 4.6.3	For all Base Building ratings, any medical and educational office facilities must be identified and the following documentation retained: a) The nature of the facility (e.g. consulting room, store room, meeting room, etc.). b) Information regarding whether the space is serviced by Base Building services. c) All calculations and measurements used to determine whether or not the space occupied by the medical or educational office facility can be included in the rating. The Assessor must retain documentation substantiating the grounds for any exclusion from the rated area calculation for the rating.
8.2.9 Occupation days	Section 4.7.2	For Base Building ratings, a lease is sufficient to confirm the number of occupation days for each functional space. If a lease is unavailable, or if the space has been occupied during the rating period outside the dates in the lease, the Assessor must obtain written documentation that confirms— a) that the occupiers had the right to make exclusive use of that part of the rated premises (e.g. agreements or email correspondence between the facility manager and occupier, or confirmation from an owner-occupier); and

Topic	Requirements	Documentation
		b) the occupiers required normal services to be supplied to that part of the rated premises (e.g. copies of requests to the building owner for service, or a statement by the building owner or facility manager). This should include confirmation from both tenant and building owner or facility manager as the first priority. If confirmation from the tenant cannot be obtained, then a statement from the building owner or facility manager is sufficient as the second priority. For Whole Building and Tenancy ratings, in addition to the Base Building evidence requirements, the Assessor must obtain documentation that shows for how much of the rating period the occupiers were actively using the space as an office (e.g. Tenant Occupancy Survey or confirmation from the building manager that the space has been used by the tenants). Note 1: A TOS should not be the sole evidence for occupation days. A lease should be used to confirm the occupied days and a TOS to confirm active use. Note 2: A tenancy schedule is not sufficient evidence to confirm the number of occupation days.
8.2.10 Fitout works days	Section 4.7.3	The documentation required for fitout works days includes both— a) written evidence obtained from building manager, owner or tenants confirming the number of fitout days for the space; and b) evidence showing that Base Building air conditioning services were required. This may include notes that fitout days occurred during the lease period, emails from the tenant to the facility manager or building owner requesting air conditioning, or tenant confirmation that they did not require Base Building air conditioning services to be turned off or down.

8.3 Documentation required for Chapter 5: Rated hours

The documentation required to determine correctly the **rated hours** depends on the data available and the method used. For each rating, the **Assessor** must ensure that the method used is clearly stated and any documentation listed below is included, relevant to the methods used.

Topic	Requirements	Documentation
8.3.1 OTA Core Hours	Section 5.3.2	For the confirmation of the rated hours under this method, the following documentation is required: a) Written documentation stating the hours of service for normal and after-hours operation as agreed upon by the building manager and tenant; b) Copies of most up to date OTA; c) Records of specific lease clauses referring to Lessor's obligations; and d) Details of any conflicting information regarding Core Hours (if applicable). If the 'OTA Hours and BMS data' method is used, the Assessor must retain BMS data representative of the plant operation for the rating period. This must include one or more of the following, in order of priority: 1) Evidence of the start up time for each primary air handling system servicing the space under the OTA, for at least one day from each of the four seasons. 2) Evidence of the start up time for each primary air handling system servicing the space under the OTA at the time of the site visit, with written confirmation from the facility manager or tenant that this is representative of operation throughout the rating period. Note: This evidence may include screenshots of HVAC schedules within the BMS, or photos of time clocks controlling the HVAC where there is no BMS present. 3) Signed statement from a BMS or mechanical contractor that the system is programmed to bring the space to comfort conditions by the start of OTA Hours.

Topic	Requirements	Documentation
		Where lower priority evidence is used, the Assessor must also retain evidence that it was not possible to obtain higher priority evidence (e.g. the BMS does not store historical HVAC schedules, or an optimised start strategy was active). Where the plant starts with a small start-up time before OTA Hours (e.g. 30 minutes prior), the Assessor may only use the 'OTA Hours and BMS data' method if they obtain— i) a signed statement from a BMS or mechanical contractor that the system is programmed to bring the space to comfort conditions by the start of OTA Hours; or ii) temperature data for at least one day from each of the four seasons for each primary air handling system serving the space under the OTA, and this data demonstrates that the space reaches comfort conditions in time for the start of OTA Hours. Otherwise, the 'OTA Hours minus two' method must be used. The Administrator may allow alternative documentation on a case-by-case basis for the use of OTA Hours and BMS data. If an Assessor is unable to provide documentation matching the above, they should contact the Administrator.
8.3.2 AHAC	Section 5.3.3	For the confirmation of the rated hours under this method, the following documentation is required: a) Copies of AHAC request data showing the date and time of each request and the space to which it applied. b) Evidence of run times for each request showing that the tenant requested that run time, or agreed to it in an OTA or related written agreement with the building owner. c) Evidence that no AHAC has been counted during the Core Hours and during the plant start-up period or the hour before the start of Core Hours if the plant start-up period is unknown. d) Drawings and measurements showing AHAC zones for requests serving different zones within a single functional space.

Topic	Requirements	Documentation
8.3.3 TOS	Section 5.3.4	For the confirmation of the rated hours under this method, a completed and signed TOS for each functional space and shift must be retained. Evidence that no method with a higher priority could be used for the functional space must also be retained. Note: Where available, a lease or OTA should be used for determining occupancy days of a functional space. Where a TOS is used for this purpose, Assessors should provide additional documentation to independently verify occupancy days. Assessors should provide explanatory notes if it is not clear from a respondent's role or response why they are suitable to complete a TOS.
8.3.4 Default Core Hours	Section 5.3.5	For the confirmation of the rated hours under this method, evidence that no method with a higher priority could be used for the functional space must be retained. If a TOS was not possible due to tenant refusal to complete a TOS, the Assessor must retain— a) evidence of the refusal; or b) evidence of repeated unsuccessful efforts to contact the owner or tenant via phone and/or email, with at least 2 weeks given for a response. The Assessor must state their reasons if giving an estimate of less than the default hours of 45 hours per week.
8.3.5 Average Core Hours	Section 5.3.6	For the confirmation of the rated hours under this method, the following evidence must be retained: a) Details of how the estimates have been calculated. b) A clear list of functional spaces. c) Associated Core Hours used to determine Average Core Hours for each space. d) Evidence that no method with a higher priority could be used for the functional space.

Topic	Requirements	Documentation
8.3.6 Computer server rooms	Section 5.3.7	For confirmation of the rated hours for computer server rooms, the following must be retained: a) Evidence showing if Base Building direct HVAC is serving the space (for Base Building rating only). b) BMS data showing computer server room air conditioning hours for a typical week or facility manager confirmation of air conditioning hours for the space. These hours must be Base Building direct HVAC hours for a Base Building rating or air conditioning hours for a Tenancy or Whole Building rating.
8.3.7 Other office support facilities	Section 5.3.8	Depending on the method used, confirmation of the rated hours for other office support facilities including meeting rooms must be retained in the following formats: a) For Base Building ratings: copies of OTA and AHAC requests, or evidence on how the Average Core Hours have been calculated or, if default values are used, evidence that no other method could be used. b) For Tenancy and Whole Building ratings: copies of booking system records or evidence of area-weighted average calculations, or evidence on how the Average Core Hours have been calculated or, if default values are used, evidence that no other method could be used.
8.3.8 Verifying long OTA and AHAC Hours	Section 5.4.2	Depending on the process used, confirmation of the rated hours must be retained, as follows, for long OTA and AHAC hours: a) Where the hours are obviously as expected and reasonable for the space: Assessor's notes explaining the reasons why long hours are obviously expected and reasonable. b) Where the hours are not obviously as expected and reasonable for the space: written and signed tenant confirmation that the rated hours are as expected and reasonable and the reasons why they are considered so.

Topic	Requirements	Documentation
8.3.9 Verifying long TOS hours	Section 5.4.3	Depending on the process used, confirmation of the rated hours must be retained as follows for long TOS hours: a) Where the hours are obviously as expected and reasonable for the space: Assessor's notes explaining the reasons why long hours are obviously expected and reasonable. b) Where the hours are not obviously as expected and reasonable for the space: written evidence showing that the TOS questions have been properly interpreted by the person surveyed. This can take the form of copies of email exchanges or detailed minutes of a phone conversation.
8.3.10 Checking expected hours	Section 5.4.4	For confirmation of the rated hours for all functional spaces , a common-sense check of the hours must be performed. This must take the form of Assessor's notes stating their judgment of whether the hours are 'obviously as expected and reasonable for the space' and giving reasons why or why not.

8.4 Documentation required for Chapter 6: Counting computers

Computer counts are applicable for Tenancy and Whole Building ratings only.

Topic	Requirements	Documentation
8.4.1 Principle and definitions	Section 6.3.2	As evidence of a site visit to count computers, the following must be retained: a) A record of how many personal computer systems have been identified within each functional space. b) Where necessary, evidence of regular use of computers, such as: 1) A report by a manager or other authoritative source that a system is in regular use.

Topic	Requirements	Documentation
		2) For computers in training rooms, etc. booking or attendance records that the Assessor has verified to be accurate, and which show both the number of computers used and the amount of time they were used for.
8.4.2 Conducting a count	Section 6.3.3	As evidence a computer count has been conducted, the following must be retained: a) Marked-up desk layouts for all spaces in the rated premises, if available; or b) Marked-up desk layouts completed by the Assessor and showing the computer count; or c) Copies of the Assessor's site notes taken during the count, if desk layouts are not available. In addition, the Assessor must identify which spaces (if any) are agile and ABW spaces, and document at which times counts have been conducted.
8.4.3 Estimating numbers of computers	Section 6.3.4	Whenever an estimate of computer numbers has been made, the following must be retained for each functional space: a) Statements giving reason(s) why the estimate had to be made. b) Calculations of the figure used (including all assumptions, estimates and interpretations involved).
8.4.4 Default method	Section 6.3.5	The Assessor must list each functional space for which the default method of counting computers has been used.

8.5 Documentation required for Chapter 7: Minimum energy and water coverage

The documentation requirements for minimum energy and water coverage are covered in Chapter 10 of *NABERSNZ The Rules – Metering and Consumption*. Additional documentation requirements specific to offices are listed below:

Topic	Requirements	Documentation
8.5.1 Minimum energy coverage	Section 7.2	For documentation required to confirm minimum energy coverage see Section 10.2.3 of <i>NABERSNZ The Rules – Metering and Consumption</i> .
8.5.2 Computer server room energy coverage	Section 7.3.1	The documentation required for energy consumption exclusions for computer server rooms is the same as the documentation required for exclusions from the rated area calculation as specified in Section 8.2.4.
8.5.3 Energy use allocations for services	Section 7.3.2	For the determination of all energy and water use allocations, the following is required: - Existing agreements and other official documentation between the builder, owner and tenants, or between tenants. - Descriptions and/or drawings of service arrangements, including exclusions. The preference is a service drawing, however detailed reports and Assessor's sketches are permissible. - Where possible, list of tenant supplementary units in the building in order to determine any spaces that need to be excluded. Any instances of special tenant requirements must also be documented. If such requirements exist, the Assessor must obtain evidence to establish that an unusual usage of the space has resulted in an increased intensity of the service required. Such documentation includes: - Documentation that either— - confirms the building has been checked and no such systems exist; or - identifies all tenant powered supplementary A/C systems serving open office or cell office spaces within the rated area. This must include location and type of area served. - Documentation that verifies a special tenant requirement exists. This must include details of unusual usage of the space and increased intensity of the services

		compared to the bulk of the office, as per the building design criteria (see Table 7.3.2.2, Step 3). 3) Additional documentation associated with the relevant procedures of Table 7.3.2.2, Table 7.3.2.3A and Table 7.3.2.3B. Where applicable, this may include: i) Method of control of supplementary systems by Base Building or Tenant control systems (see Table 7.3.2.3B, Rule B3 and Table 7.3.2.2, Step 1). ii) Location of similar supplementary systems throughout the building (see Table 7.3.2.2, Step 2). iii) Chilled water, heating water, condenser water, air supply and electric schematics for tenant supplementary and Base Building services (see Table 7.3.2.3B, Rule B2). iv) Base Building and tenant fitout mechanical and electrical services drawings (see Table 7.3.2.3B, Rule B1). v) Percentage area and tenant calculations for centrally provided services (see Table 7.3.2.3B, Rule B2). vi) Documents identifying Base Building amenities on each floor which may be serviced from tenant switchboards/meters (see Table 7.3.2.3B, Rule B4).
8.5.4 Energy consumption in excluded spaces	Section 7.3.3	For energy consumption in excluded spaces, the following must be retained: a) A comprehensive list of all spaces for the exclusive use of office tenants, whether or not the space is included or excluded from the rated area calculation. b) Calculations and information relating to the energy use of other spaces which are <u>not</u> for the exclusive use of office tenants, with reference to the metering and exclusion requirements of other <i>NABERSNZ Rules</i> documents, as appropriate.
8.5.5 Car parks	Section 7.3.4	The Assessor must fully document both the method and all data used to proportion car park energy usage.

		Dedicated parking space, pass or key allocation data must be sourced from the lease documentation. Documentation to support the proportioning of energy use, includes— a) lease documentation; b) documentation signed by office tenants that identifies the proportion of allocation; or c) Assessor's calculation of relevant proportions.
8.5.6 Minimum water coverage	Section 7.4.1	For documentation required to confirm minimum water coverage, see Section 11.2.3 of <i>NABERSNZ The Rules – Metering and Consumption</i>.

Appendix A Tenant Occupant Survey

The following form must be completed by a staff member with knowledge of the nominated **functional space**. At least one form must be printed and completed for every shift operating in each **functional space**, and kept on file for auditing purposes.

The questions in this survey are aimed at finding the average number of hours per week that at least 20 % (one in five) of people who work in the **functional space** were present for the **rating period**. This information is only used to assess the energy and water consumption and greenhouse gas performance of the building relative to how many hours it is used.

Functional space:

Rating period, or period for which the manager or supervisor was responsible for the space: From _____ to _____
(to be completed by the **Assessor**)

Please answer the following questions with respect to the **functional space** and **rating period** specified above.

Name of respondent: _____

Position: _____

Location of staff: _____

What are the typical days of work within the area you work in?: _____

By what time at the start of the typical day have approximately 20 % (1 in 5) of people arrived within the area you work in?: _____

By what time at the end of the typical day have most people gone except for approximately 20 % (1 in 5) people who are still in the area you work in?: _____

Describe any periods where more than 20 % of people would be present outside these typical hours
(e.g. '4 hours one Saturday each month' or 'a total of 50 hours at the end of financial year'):

Do all the answers above apply for the whole **rating period** (shown at top)?:

If not, what dates do the answers apply to? Please give alternative responses for the rest of the **rating period** (ignoring periods when the space was vacant):

Please advise how you are aware of the occupancy patterns of the area you work in?:

I confirm that I have had regular, detailed and direct knowledge of the staff movements and occupancy patterns of the specified office space over the specified period. The responses above are correct to the best of my knowledge.

Signature of respondent:

Date:

Appendix B Calculations

B.1 Rated area calculation

Calculate the **rated area** as follows:

- Identify the **functional spaces** according to Section 4.4.
- For each **functional space**, determine the proportion of time the space is **occupied** (not vacant).
- For each **functional space**, determine the time-weighted area by multiplying the floor area of the space by the proportion of time the area was **occupied**.
- Determine the **rated area** by adding all the time-weighted areas for each of the **functional spaces**.

This calculation is expressed in the formula below:

$$A = \sum_{i=1}^N o_i a_i$$

where:

A = **rated area** (m²)

i = each **functional space**

a_i = floor area of each **functional space** (m²)

o_i = the proportion of the **rating period** that the space was **occupied**.

Example: A building has two 1,000 m² **functional spaces**, but one of them has been vacant for three months during the **rating period**.

The **rated area** is assessed as:

$$A = \left(\frac{12}{12}\right) 1,000 + \left(\frac{9}{12}\right) * 1,000 = 1,000 + 750 = 1,750$$

B.2 Tenancy and Whole Building rated hours calculation

The occupation-weighted area is calculated by the **NABERSNZ rating input form** with data input by the **Assessor**. The **NABERSNZ rating input form** does this for each **functional space** determined in Section 4.4 with the following methodology:

- For each distinct period during the **rating period** in which the space was **occupied** and the hours of occupation were constant, multiply its hours per week by the proportion of the 12-month **rating period** that the distinct period represents.

- b) Add the hours for each such distinct period. This may include corrections as per 5.3.2.1 (Step 3: **OTA** Hours minus two) and 5.3.2.2.
- c) Multiply the area of the **functional space** by the total number of hours per week.
- d) Add the occupation-weighted areas of all the **functional spaces** together and then divide by the total **rated area** to calculate the area-weighted average hours per week for the **rated premises**.

This method applies equally to normal and after-hours operation. This calculation is expressed in the formula below:

$$H = \frac{\sum_{i=1}^N h_i o_i a_i}{A}$$

where:

H = **rated hours** (hours/week)

A = **rated area** (m²)

i = each **functional space**

h_i = hours allocated to each **functional space** (hours/week), which may include corrections if relevant (see step b above)

a_i = area of each **functional space** (m²)

o_i = the proportion of the **rating period** that the space is **occupied**

B.3 Base Building rated hours calculation

The total **rated hours** is calculated by the **NABERSNZ rating input form** with data input by the **Assessor**. The **NABERSNZ rating input form** does this with the following methodology:

- a) Core Hours **H_c** is calculated according to the method described above in Section B.2.
- b) After-hours times **H_a** is calculated using the following method:
 - 1) The after-hours air conditioning (AHAC) hours in equivalent hours per week are determined for **functional space**.
 - 2) The equivalent AHAC hours for the **rated premises** **H_a** is determined with the following formula:

$$H_a = \frac{\sum_{i=1}^N h_{a,i} o_i a_i}{A}$$

where:

H_a = equivalent AHAC hours for the **rated premises**

h_{a,i} = equivalent AHAC hours for each **functional space** (hours/week)

- c) The equivalent AHAC hours is added to the core hours H_c to calculate the total **rated hours** H :

$$H = H_c + H_a$$

B.4 Sampling uncertainty for estimated computer counts

Analyse the sample **data** to determine an estimate of the total number of computers, as follows:

- a) Calculate the computer density (average number of computers per unit floor area) for each individual **functional space**, x ; and the sample mean (average over the whole sample of spaces) X = total computers divided by total floor area of the sampled **functional spaces**.
- b) Calculate the sample standard deviation, S , of the individual computer density figures, x , using the formula:

$$S = \sqrt{\frac{\sum_j [(x_j - X)^2 a_j]}{a - 0.05A}}$$

where:

j is the number of spaces surveyed to date

A is the total area subject to the sampling methodology, and

$$a = \sum_j a_j$$

- c) Calculate the sampling uncertainty, U , in the **functional spaces** you have sampled, as follows:

$$U = 0.44S \sqrt{\frac{A}{a} - 1}$$

If $U \geq 0.1X$ then the sampling uncertainty is 10 % or more, and the sample is too small. Take the next **functional space** from the random list, count the number of computers in regular use, add this data to the data already collected, and repeat the estimation of the sampling uncertainty. Repeat adding data for additional spaces while $U \geq 0.1X$.

When $U < 0.1X$ the statistical uncertainty in your figure is now less than 10 %, and the figure can be used. If more data has been collected than what is essential, it is better to use the extra data to improve the uncertainty.

- d) Multiply the sample mean, X , by the total area subject to the sampling methodology, A . This is the **rated area** excluding any **functional spaces** in which the computers were counted separately in the first step of this process.

B.5 Accuracy calculations procedure

Note: The **NABERSNZ rating input form** includes sections for calculating the error that could result if inaccurate assumptions, approximations or un-verified data are used in an assessment. It is important that this 'worst-case' error is known and is kept within limits so that NABERSNZ ratings can be relied upon for comparison.

B.5.1 Potential error – area, computer count, energy and water consumption

For all data inputs except hours, the **potential error** is the total of all **acceptable estimates** (including assumptions, approximations, and un-verified data) used in place of **acceptable data**.

B.5.2 Potential error – hours

Potential error is calculated differently for hours because potential inaccuracy in the area-weighted average is not readily apparent from the raw occupancy data. The calculations are based on the following procedure:

- a) Calculate the **rated hours** as specified in Chapter 5 and record the result.
- b) Set the hours for all **functional spaces** with uncertain hours to zero and record the value for **rated hours** that would result. This is the worst-case figure. Return the hours to their 'rated' values.
- c) The overall **potential error** in hours is then the **rated hours** from step a) above minus the worst-case total calculated in step b).

B.5.3 Total rating accuracy

The combined effect of all assumptions, **acceptable estimates**, and un-verified data on a rating is calculated in the **NABERSNZ rating input form** as follows:

- a) Calculate a 'Case A' rating using all the assumptions, **acceptable estimates**, and un-verified data intended to be used in the assessment.
- b) Calculate the **potential error** for each data input.
- c) Calculate a 'Case B' rating in which the **potential errors** are—
 - 1) (for **rated area**, **rated hours** and computer count data) added to the 'Case A' inputs; or
 - 2) (for energy and water consumption data) subtracted from the 'Case A' inputs.

The 'Case A' rating meets the accuracy requirements of this Section if the results for the 'Case A' and 'Case B' ratings differ by no more than 5 % (in kgCO₂/m² or kL/m², as appropriate).

Appendix C Rating period

C.1 Allowance for submission

C.1.1 General

A NABERSNZ rating is based on 12 months of **acceptable data**, called the **rating period**. Once certified, the rating is valid for up to 12 months, called the **validity period**.

It can take time for an **Assessor** to complete a rating. Therefore, a period of 120 calendar days is given to certify the rating after the end of the **rating period**. Ratings certified after the 120 calendar days will have a reduced **validity period** to ensure all ratings are based on current data.

Sections C.1.2 and C.1.3 provide examples of this principle.

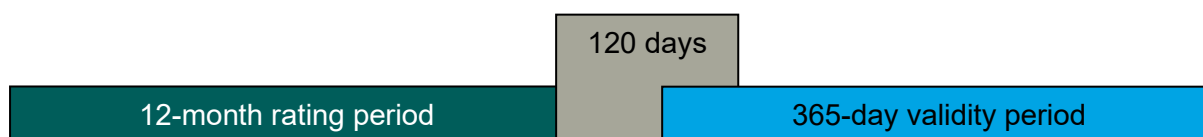
C.1.2 Scenario 1

A NABERSNZ rating is certified by the **Administrator** within 120 calendar days of the end of the **rating period**. It will be valid for 365 days from the date of certification: see Figure C.1.2.

Example: The process for date of certification will be as follows:

- The **rating period** is 1 January 2024 to 31 December 2024. The due date is therefore 30 April 2025.
- The **Assessor** submits the rating on 1 February 2025, and the **Administrator** certifies it on 5 February 2025. This is before the due date.
- The rating will therefore be valid for 365 days from the date of certification (5 February 2025).
- The **validity period** will be 5 February 2025 to 4 February 2026.

Figure C.1.2: Rating certified within 120 days of end of rating period



C.1.3 Scenario 2

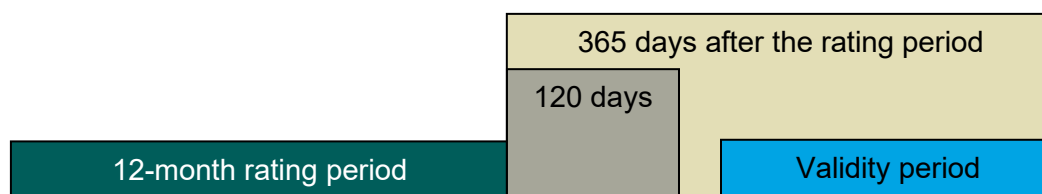
A NABERSNZ rating is certified by the **Administrator** more than 120 calendar days after the end of the **rating period**. It will be valid for 365 days from the end of the **rating period**: see Figure C.1.3.

Example: The process for date of certification will be as follows:

- The **rating period** is 1 January 2024 to 31 December 2024. The due date is therefore 30 April 2025.

- b) The **Assessor** submits the rating on 1 June 2025, and the **Administrator** certifies it on 6 June 2025. The rating was certified after the due date.
- c) The rating will therefore be valid for 365 days from the end of the **rating period** (31 December 2024).
- d) The validity period will be 6 June 2025 to 31 December 2025.

Figure C.1.3: A rating submitted after 120 days from end of rating period



C.2 Allowance for responses

C.2.1 General

Assessors are given 120 days after the **rating period** to submit ratings and be certified by the **Administrator**. The **Assessor** should allow 10 working days within this 120-day period for a response from the **Administrator**. This means that if an **Assessor** submits a rating towards the end of the 120-day period and it is certified after the due date because of processing and response time, the **validity period** may be less than 365 days.

Section C.2.2 provides an example of this principle.

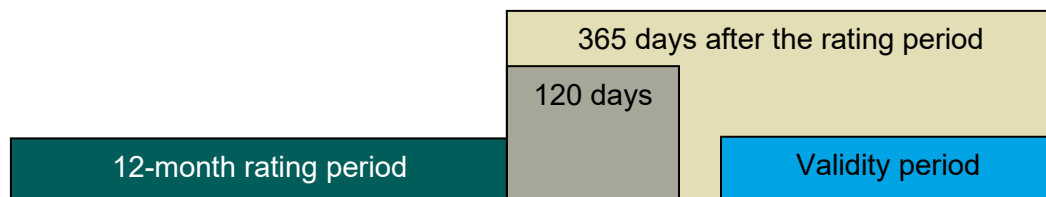
C.2.2 Scenario

A NABERSNZ rating is submitted with the **Administrator** one day before the due date (120 days from the end of the **rating period**). The **Administrator** takes 7 calendar days to complete quality assurance checks, and the **Assessor** takes 6 calendar days to respond to queries that arose from the quality assurance checks. The rating will be valid for 365 days from the end of the **rating period**: see Figure C.2.2.

Example: The process for date of certification will be as follows:

- a) The **rating period** is 1 January 2024 to 31 December 2024. The due date is therefore 30 April 2025.
- b) The **Assessor** submits the rating on 29 April 2025, 119 days after the end of the **rating period**. This is before the due date.
- c) The **Administrator** responds on 6 May 2025 requesting further clarification.
- d) The **Assessor** responds on 12 May 2025 and the rating is certified the same day on 12 May 2025.
- e) The rating was certified more than 120 days after the end of the **rating period**. The **validity period** will therefore be 12 May 2025 to 31 December 2025 (234 days from the date of certification).

Figure C.2.2: A rating submitted before, but certified after 120 days from the end of the rating period



Appendix D List of changes

The following tables list the changes to the content of *NABERSNZ The Rules – Energy and Water for Offices v1.2(March 2021)* in order to produce this version 2.0.

Chapter 1: Introduction		
Version 1.2 (old version)	Version 2.0 (current version)	Changes made
1.5 What is new in this document		Included latest changes.
1.6 Related documents		Updated document references. Clarified that the most recent version of NABERSNZ Rules and Rulings should be used.

Chapter 2: Terms and definitions		
Version 1.2 (old version)	Version 2.0 (current version)	Changes made
2 Terms and definitions		Definition of utility clarified (as highlighted): “Landlords which on-sell electricity or water where they neither hold a licence nor have an exemption deemed valid by the Administrator for needing a licence;” Updated definition for ‘special tenant requirement’, which erroneously duplicated the definition for ‘supplementary air conditioning equipment’ in a previous update. Updated definition for ‘medical office facility’ to remove dentists’ surgeries. Added evidence clarification to the definition of ‘ready for occupation’. Expanded definition of Public access space. Amended definition of Tenant Occupancy Survey (TOS).

Chapter 3: Key concepts and procedures

Version 1.2 (old version)	Version 2.0 (current version)	Changes made
3.2.1 Eligibility criteria		Added new eligibility criterion for buildings undergoing major refurbishment.

Chapter 4: Rated area

Version 1.2 (old version)	Version 2.0 (current version)	Changes made
4.1 Summary	4.1 General	Corrected typos in introductory sentence.
4.2 Process overview		Clarified wording for step 7.
4.5.1 General		Note 3 added which advises that 'the area of spaces which have been excluded should be entered into the NABERSNZ rating input form but their occupancy days should be marked as 0. Clarified that functional spaces without consumption data must be excluded according to the requirements of Section 4.5.6.
4.5.3 Excluding spaces that cannot be considered offices		Clarified ambiguous wording of 4.5.3 a) and b). Added numbering to Table 4.5.3. Updated item 1 to clarify that non-office spaces which are exclusively for use of office tenants are not necessarily excluded from the rated area. Updated items 6, 8, 16 and 25 to clarify that spaces must be part of the NLA to be included in the rated area. Changed "Commercial cafeterias" to "Cafeterias" to better incorporate cafes exclusively for tenant use.
4.5.6 Functional spaces without consumption data		First paragraph slightly reworded for clarity.
4.6.3.1 General		Added notes clarifying treatment of medical administration areas. Added dental surgeries as a type of facility that is ineligible to be considered a medical office tenancy.

	Deleted the note incorrectly referencing the Metering and Consumption Rules.
4.6.3.2 Base building ratings	Corrected errors in Example 3. Added new Example 4 to demonstrate calculations where a rated premises has both public access areas and medical or educational office facilities.
4.7.3 Fitout works days	Clarified that days where the definition of occupied is met are not counted as fitout works days, and that days beyond the fitout works 30 day limit are considered unoccupied.

Chapter 5: Rated hours

Version 1.2 (old version)	Version 2.0 (current version)	Changes made
5.2 Process overview		Added new step 6 for entering core hours that vary over the rating period or throughout the week.
5.3.2 Core Hours	5.3.2 OTA Core Hours	Updated heading.
5.3.2.1 Owner/Tenant Agreement (OTA) Hours Method		OTA Hours Method: Permission to use “House Rules” that contain information regarding the Core Hours added, if mentioned in the OTA. Same language requirements kept. Under Step 2, the documentation requirements before the example were removed as they are repetitious with Section 8.3.1. Added an example of acceptable wording for comfort conditions in an OTA. Clarified requirements for ‘OTA Hours and BMS data’ method.
5.3.2.2 OTA Hours correction for Tenancy and Whole building ratings		Meaning of text clarified and paragraphs re-worded.
5.3.4.1 TOS General		General update regarding who confirms hours. New Note 2 regarding prioritising a lease or OTA for determining occupancy days of a functional space.

5.3.4.2 Standard for acceptable data		Clarified data entry method for multiple TOSs.
5.3.8.2 a) Base Building ratings		Preference list of methods corrected.
-	5.5 Entering Core Hours that vary	New section.

Chapter 6: Counting computers

Version 1.2 (old version)	Version 2.0 (current version)	Changes made
6.2 Process overview		Deleted obsolete note referring to a previous version update.
6.3.2.4 Regular use		Added computer server rooms as a location where computers are not typically in regular use.
6.3.5 Default computer count		The default computer count can no longer be applied to functional spaces where computers are not typically in regular use, including low-use training rooms, computer server rooms, boardrooms, meeting rooms or stores.
6.3.6 Conducting a survey		This section has been removed.

Chapter 7: Minimum energy and water coverage

Version 1.2 (old version)	Version 2.0 (current version)	Changes made
7.1 Summary	7.1 General	Updated section number references to the Metering and Consumption Rules.
7.2 Minimum energy coverage		Updated section number references to the Metering and Consumption Rules.
7.2.2 Base Building ratings		Sump pits and hydraulic pumping clarified in the list of energy coverage for Base Building ratings.
7.2.6.1 General		Corrected typo.

7.3.1.2 General	Note deleted as presented repetitious information.
7.4.1 General	Updated section number references to the Metering and Consumption Rules.

Minimum water coverage

Version 1.2 (old version)	Version 2.0 (current version)	Changes made
8 Minimum water coverage	-	This chapter was combined with Chapter 7.

Metering systems

Version 1.2 (old version)	Version 2.0 (current version)	Changes made
9 Metering systems	-	The section removed from The Rules Energy and Water for Offices and moved to The Rules Metering and Consumption

Consumption data

Version 1.2 (old version)	Version 2.0 (current version)	Changes made
10 Consumption data	-	The section removed from The Rules Energy and Water for Offices and moved to The Rules Metering and Consumption

Chapter 8: Documentation required for accredited ratings

Version 1.2 (old version)	Version 2.0 (current version)	Changes made

11.1 Summary	8.1 General	Clarified that the documentation requirements in the Metering and Consumption Rules also apply.
11.2.1 Office rateable area	8.2.1 Office NLA	New requirement to document any changes from the survey plans during the site visit.
11.2.3 Exclusions	8.2.3 Exclusions	Updated documentation requirements for Section 4.5.3 – evidence for including functional spaces must now be retained in addition to any evidence for excluding spaces.
11.2.6 Excluding other office support facilities	8.2.6 Other exclusions	New evidence requirements for attempting to obtain consumption data prior to excluding the functional space.
11.2.10 Adjustments for unoccupied spaces	8.2.9 Occupation days	Separated into two sections and updated evidence requirements. A lease is to be used to confirm occupancy days, not a Tenant Occupancy Survey.
	8.2.10 Fitout works days	
11.3.1 Core Hours	8.3.1 OTA Core Hours	New evidence priority order for 'OTA Hours and BMS data' method.
11.3.3 TOS	8.3.3 Rated hours	New Note regarding a lease being used to confirm occupancy days, not a Tenant Occupancy Survey.
11.3.5 Default Core Hours	8.3.4 Default Core Hours	New evidence requirements for attempting to obtain TOS prior to moving to default hours.
11.4.5 Conducting a survey	-	Deleted obsolete section referring to a method only available in previous versions.
11.5 Documentation required for Chapter 7: Minimum energy and water coverage	8.5 Documentation required for Chapter 7: Minimum energy and water coverage	Updated section number references to the Metering and Consumption Rules.

Appendix B: Rating period

Version 1.2 (old version)	Version 2.0 (current version)	Changes made
Appendix C Rating period	Appendix B Rating period	-

Appendix C: Calculations

Version 1.2 (old version)	Version 2.0 (current version)	Changes made
Appendix B Calculations	Appendix C Calculations	The section removed from The Rules Energy and Water for Offices and moved to The Rules Metering and Consumption

Guide to non-utility metering system validation

Version 1.2 (old version)	Version 2.0 (current version)	Changes made
Appendix D Calculations	-	The section removed from The Rules Energy and Water for Offices and moved to The Rules Metering and Consumption

Appendix D: List of changes

Version 1.2 (old version)	Version 2.0 (current version)	Changes made
Appendix E List of changes	Appendix D List of changes	Included latest changes.

Contact us

**NABERSNZ is administered by the
New Zealand Green Building Council**

Level 2 Tower 1
205 Queen Street
Auckland Central,
Auckland 1010

T 09 379 3996

E nabersnz@nzgbc.org.nz

W nabersnz.govt.nz