



The Rules

Energy for Warehouses and Cold Stores

Version 1.0 — September 2026

This publication is based on NABERS The Rules – Energy for Warehouses and Cold Stores Version 1.1, published in April 2026.

NABERS is a national Australian government program and is administered by New South Wales Government.

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

Published September 2026

Contents

1	Introduction	5
1.1	General	5
1.2	Interpretation of the Rules and Rulings	6
1.3	Situations not covered by the Rules	6
1.4	How to use this document	6
1.5	Related documents	7
2	Terms and definitions	8
3	Key concepts and procedures	13
3.1	General	13
3.2	Eligibility criteria	13
3.3	Rating period	14
3.4	Standards for acceptable data and estimates	14
3.5	Site visits	15
3.6	Documentation and record-keeping	16
3.7	Alternative methodologies	17
4	Rating process	18
4.1	Rating inputs	18
4.2	Rating process	20
5	Rated site area	21
5.1	General	21
5.2	Process overview	21
5.3	Total site GLA	21
5.4	Area exclusions	22
5.5	Rated site area	23
6	Refrigerated spaces volume	24
6.1	General	24
6.2	Process overview	24
6.3	Area, height and volume of each refrigerated space	25
6.4	Adjustments for operational period	26
7	Rated hours	27
7.1	General	27

7.2	Process overview	27
7.3	Determining rated hours	27
8	Non-refrigerated areas	30
8.1	General	30
8.2	Process overview	30
8.3	Exclude cold and cool room areas	30
8.4	Determining rated conditioned area	31
8.5	Determining rated non-conditioned area	32
9	Full-time equivalent workers	33
9.1	General	33
9.2	Process overview	33
9.3	Determining number of FTE workers	33
10	Annual turnover ratio	36
10.1	General	36
10.2	Process overview	36
10.3	Determining annual turnover ratio	36
11	Minimum energy coverage	39
11.1	General	39
11.2	Minimum energy end uses coverage	39
12	Documentation required for accredited ratings	44
12.1	General	44
12.2	Documentation required for Chapter 5: Rated site area	45
12.3	Documentation required for Chapter 6: Refrigerated spaces volume	46
12.4	Documentation required for Chapter 7: Rated hours	49
12.5	Documentation required for Chapter 8: Non-refrigerated areas	50
12.6	Documentation required for Chapter 9: Full-time equivalent workers	51
12.7	Documentation required for Chapter 10: Annual turnover ratio	52
12.8	Documentation required for Chapter 11: Minimum energy coverage	53
Appendix A	Rating period	55
A.1	Allowance for submission	55
A.2	Allowance for responses	56
Appendix B	Eligible rating configurations	58
Appendix C	Pitched roof height measurement guide	59
Appendix D	Warehouse Operational Survey (WOS)	60

1 Introduction

1.1 General

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 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.

This document contains **Rules** for **Assessors** conducting an energy rating for warehouses and cold stores facilities and provides the framework for assessing warehouses and cold stores as follows:

- Rated site area**, see Chapter 5.
- Refrigerated spaces** volume, see Chapter 6.
- Rated hours, see Chapter 7.
- Non-refrigerated areas**, see Chapter 8.
- Full-time equivalent workers**, see Chapter 9.
- Annual turnover ratio**, see Chapter 10.
- Minimum energy coverage, see Chapter 11.
- Documentation required for accredited ratings, see Chapter 12.

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**.

Assessments for an accredited rating must comply with the version of the **Rules** and any relevant **Rulings** current on the day the rating application is lodged to NABERSNZ, unless the **Administrator** has specifically approved otherwise in writing.

1.3 Situations not covered by the Rules

Assessors must 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 must 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.

1.4 How to use this document

The term "**Rules**" refers to a body of works produced by NABERSNZ that specify what must 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 for Warehouses and Cold Stores*. 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.

1.5 Related documents

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

- a) *NABERS Ruling — Shared Services and Facilities*, v1.0, March 2022
- b) *NABERSNZ The Rules — Metering and Consumption*, v1.0, September 2026
- c) *NABERS The Rules — Thermal Energy Systems*, v1.0, August 2021
- d) *Property Council New Zealand (PCNZ), Guide for the Measurement of Rentable Areas*, current version

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.
annual turnover ratio	A metric to determine the intensity of activities in a warehouse. It is calculated as the annual product throughput divided by the maximum inventory level.
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.
cold room	A refrigerated room or building designed for storage of goods in the temperature range between -20 °C and 0 °C. Note: Blast freezers that are not sub-metered and have a temperature set point below 0 °C can be treated as cold rooms.

Term	Definition
cool room	A refrigerated room or building designed for storage of goods in the temperature range between 0 °C and 15 °C.
conditioned area	A non-refrigerated area is classified as a conditioned area if— a) the space has any heating, ventilation, air-conditioning (HVAC) and cooling services designed to control the temperature to ensure comfort conditions for either human occupation or product quality; b) HVAC services operate at least 60 days in a year; c) the space is part of the rated site area; and d) energy usage associated with the space is downstream of the rated metered consumption. Note: This definition excludes cold room and cool room areas.
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 or activities) that energy is used for.
Full-Time Equivalent (FTE) workers	The equivalent number of workers who work at a warehouse for 38 h per week. Note: The Rules do not require the exact nature of employment (e.g. casuals, independent contractors or working variable hours) to be disclosed.
Gross Lettable Area (GLA)	The area defined using the measurement standard for rated area .
Heating, Ventilation and Air-Conditioning (HVAC)	Any system that is used for heating, ventilating or conditioning the air in an enclosed space.
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>.

Term	Definition
measurement standard for rated area	The standard used for determining the Gross Lettable Area (GLA) of the rated premises , as set out in <i>Property Council New Zealand (PCNZ), Guide for the Measurement of Rentable Areas, current version</i> .
NABERSNZ rating input form	The rating input form provided by NABERSNZ for use by Assessors in the calculation of accredited ratings.
non-conditioned area	Any part of the rated site area that is neither a cold room , cool room nor conditioned area .
non-refrigerated area	The area in the non-refrigerated space . This can include conditioned area and/or non-conditioned area .
non-refrigerated space	Any part of the rated site area that is not identified as a refrigerated space .
occupied	A space within the rated site area that is leased and being actively used as a warehouse facility , including use as a warehouse support facility .
operational area	Any part of the rated site area that is not a refrigerated space , with distinct operational hours .
operational hours	The weekly number of hours during which an operational area is used by workers. Note: Operational hours are only considered for non-refrigerated areas. HVAC plant operating times are not the same as operational hours.
operational period	The number of days per year that the refrigeration system at the rated premises is in operation.
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. Note: Unless specifically stated in the Rules, all acceptable estimates contribute to the potential error.
rated premises	The building or building section to be rated.

Term	Definition
rated site area	The total site GLA of the rated premises less any area exclusions.
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.
refrigerated area	The area in the refrigerated space .
refrigerated space	Any space within the rated site area that is occupied by a cold room or a cool room .
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 .
Supervisory Control and Data Acquisition (SCADA)	A control system that allows a site to control its industrial processes and operations.
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 A for further details.
warehouse facility	Buildings or part of a building where goods are stored and distributed as the main function. A warehouse facility could include the following areas: a) Non-conditioned area. b) Conditioned area. c) Cold room. d) Cool room.

Term	Definition
	e) Warehouse support facilities , e.g. offices, mail rooms.
Warehouse Operational Survey (WOS)	A survey of the staff, managers or supervisors responsible for operational areas in the rated premises , conducted in accordance with the Rules .
warehouse support facility	A space within the rated site area that directly supports the operation of the warehouse facility. A warehouse support facility could include the following areas: a) Offices, subject to the requirements of Section 5.4.3. b) Café and canteen that is for the exclusive use of the rated premises. c) Back of house area, including plantrooms and switch rooms.

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

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

- a) **Premises type**: During the **rating period**, the **rated premises** was used as a **warehouse facility**. The **rated premises** must either be a whole building, a group of buildings, or part of a building in a multi-tenancy building, see Appendix B.

Large format retail premises, storage facilities without distribution functions, and facilities with on-site processing or manufacturing as a primary purpose are not eligible as warehouses.
- b) **Premises consumption data**: Less than 80 % of the total site **GLA** has been excluded due to lack of consumption data, see Section 5.4.2.
- c) **Premises energy coverage**: The minimum energy coverage for the premises type is met, as described in Chapter 11.
- 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 12 months after the certificate of occupancy (however described in the relevant jurisdiction) was issued.
- e) **Minimum rated site area**: The **rated site area** is at least 650 m². This was the smallest premises used to develop the rating tool.

Note: Industrial sites that function primarily to manufacture or transform goods from one state to another should not be rated using this tool, e.g. pet food manufacturing or any metal casting or forging.

The NABERSNZ Energy for Warehouses and Cold Stores rating tool is primarily targeted at facilities with logistics and distribution functions. As such, the energy associated with transforming goods from one state to another is not part of the rating's minimum energy coverage.

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.

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

3.4 Standards for acceptable data and estimates

3.4.1 General

An assessment for an accredited NABERSNZ Energy for Warehouses and Cold Stores 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 below. 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 the 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, 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.

3.5 Site visits

3.5.1 General

For every rating application, **Assessors** must conduct a 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 **rated site area**.
- d) Check for inclusions in and exclusions from energy coverage (as appropriate).
- e) Check floor configuration.
- f) Visit plant rooms to ensure that all relevant equipment is covered under the meters included in the rating.
- g) Resolve any other issues that arise.

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

The site visit must take place during or up to 120 days after the **rating period**. A new site visit must be conducted as part of every NABERSNZ rating application.

3.5.2 Delegating site visit to another Assessor

Where an **Assessor** cannot undertake a site visit to inspect the **rated premises**, **Assessors** may delegate this task to another **Assessor** accredited specifically in Energy for Warehouses and Cold Stores 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, as per the documentation requirements listed in Chapter 12.

3.5.3 Situations where 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 lodged 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 12, 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 an alternative methodology 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 Rating process

4.1 Rating inputs

In NABERSNZ Energy for Warehouses and Cold Stores, the following inputs are required for a rating:

- a) **Rated site area.**
- b) Inputs for **refrigerated spaces** (**cold rooms** and **cool rooms**):
 - 1) Area.
 - 2) Height.
 - 3) **Operational period.**
- c) Inputs for **non-refrigerated spaces** (**conditioned areas** and **non-conditioned areas**):
 - 1) Area.
 - 2) Occupation days.
 - 3) **Operational hours.**
- d) Site activity, determined by either—
 - 1) number of **full-time equivalent (FTE) workers**; or
 - 2) **annual turnover ratio.**
- e) Energy consumption of the **rated premises.**

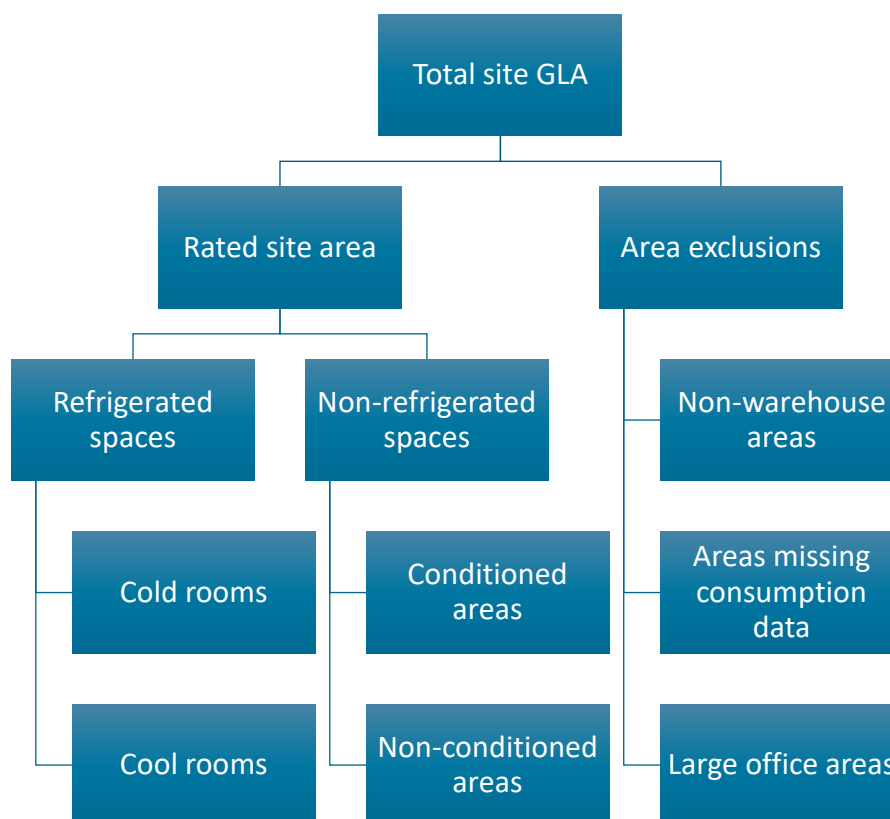
Note: In NABERSNZ Energy for Warehouses and Cold Stores ratings, either the number of **FTE workers** or the **annual turnover ratio** at the **rated premises** can be used to describe the intensity of the site's activity.

The **annual turnover ratio** option is designed for automated sites, while the option of using the number of **FTE workers** is designed for a more manual work site.

The NABERSNZ Energy for Warehouses and Cold Stores rating tool requires several different area measurements to correctly benchmark energy consumption against comparable facilities.

The area of the site can be broken down as shown in Figure 4.1.

Figure 4.1: Breakdown of site area



The different inputs required for each of the spaces are shown in Table 4.1, as well as the metric calculated by the **NABERSNZ rating input form** that is used to benchmark the **rated premises** against comparable **warehouse facilities**.

Table 4.1: Rating inputs and metrics by space type

Rating inputs					Benchmarking metric
Space type	Area	Height	Occupancy	Hours	
Whole site	✓				Rated site area
Cold room	✓	✓	Operational period		Rated volume
Cool room	✓	✓	Operational period		Rated volume
Conditioned space	✓		Occupation days	Operational hours	Rated conditioned area Rated hours
Non-conditioned space	✓		Occupation days	Operational hours	Rated non-conditioned area Rated hours

4.2 Rating process

The rating process is as follows:

- a) *Step 1:* Determine the **rated site area**, see Chapter 5.
- b) *Step 2:* For the **refrigerated space**, determine the area and rated volume for **cold rooms** and **cool rooms**, see Chapter 6.
- c) *Step 3:* For the **non-refrigerated space**, determine the **operational hours** for different **operational areas**, see Chapter 7.
- d) *Step 4:* For the **non-refrigerated space**, determine the rated **conditioned area** and rated **non-conditioned area**, see Chapter 8.
- e) *Step 5:* Determine either the **FTE workers** (see Chapter 9) or the **annual turnover ratio** (see Chapter 10).

5 Rated site area

5.1 General

In NABERSNZ Energy for Warehouse and Cold Stores, the **rated site area** is used as a basic index for the size and extent of the facilities present at the **rated premises**. The **rated site area** is the site's **Gross Lettable Area (GLA)** modified to exclude certain areas.

 For documentation requirements, see Section 12.2.

5.2 Process overview

The process for determining the **rated site area** must be in accordance with Table 5.2.

Table 5.2: Determining rated site area

Step	Task	Reference
1	Determine total site GLA	Section 5.3
2	Identify area exclusions	Section 5.4
3	Calculate rated site area	Section 5.5

5.3 Total site GLA

The **GLA** of the **rated premises** must be verified by the **Assessor** to have been determined in accordance with the **measurement standard for rated area**, using one of the following methods:

- Reference to a third-party survey or to lease documentation that is explicitly based on the **measurement standard for rated area**.
- Reference to a third-party survey or to lease documentation that is explicitly based on superseded documents considered to be the equivalent of the **measurement standard for rated area**.
- Reference to lease documentation that does not explicitly reference the **measurement standard for rated area**, but that has been verified by the **Assessor** to be **GLA**.
- Direct measurement from current plans or scaled prints, measured to the **measurement standard for rated area**.
- Site measurements verified by the **Assessor** to have been taken in accordance with the **measurement standard for rated area**.

Note: Outdoor spaces must not be included in total site **GLA**.

Regardless of the method used to determine total site **GLA**, the **Assessor** must ensure that the information accurately reflects the configuration of the **rated premises** and its uses during the **rating period**.

 For documentation requirements, see Section 12.2.1.

5.4 Area exclusions

5.4.1 Non-warehouse GLA

Where the **Assessor** identifies that the total site **GLA** includes non-warehouse facilities, the following should be conducted in sequence:

- a) *Step 1:* Determine the area that is not a warehouse or **warehouse support facility**.
- b) *Step 2:* Exclude the area that is not a warehouse or **warehouse support facility**.

 For documentation requirements, see Section 12.2.2.

5.4.2 Area without consumption data

Where **acceptable data** or **acceptable estimates** of the energy consumption for an area are not available for reasons beyond the control of the **Assessor** or customer, the area must be excluded from calculation of the **rated site area**.

Examples of area exclusions include the following:

- a) When **utility** bills for energy consumption within the minimum energy coverage cannot be obtained for areas within buildings that do not have an **embedded network**. Situations where this may occur include the following:
 - 1) When tenants have left the building and cannot be contacted to obtain energy bills.
 - 2) When the tenants refuse to provide required energy bills, and these tenants cannot be obligated to do.
- b) When the **utility** is unable to provide the necessary data to cover the minimum energy coverage for the area.
- c) When a non-**utility metering system** is unable to provide the data necessary to cover the minimum energy coverage for the area and estimates were above the 5 % **potential error** allowance.

 For documentation requirements, see Section 12.2.3.

5.4.3 Large office area

For each office area within the total site **GLA**, the **Assessor** must determine whether the total contiguous office area is—

- a) more than 5,000 m²; or
- b) more than 50 % of the total site **GLA**.

Where either of these criteria are met, the entire office area must be excluded. The energy consumption of the excluded office area is not part of the minimum energy coverage.

Where neither of the criteria are met, the **Assessor** must determine whether the office areas directly support the operation of the **warehouse facility**. Office areas that directly support the operation of the **warehouse facility** should be included in the **rated site area**. For offices that do not directly support operation of the **rated premises** (such as offices with regional administrative or corporate functions), the **Assessor** can choose to either fully include or exclude the area and associated energy consumption of the office space.



For documentation requirements, see Section 12.2.2.

Example 1: A **warehouse facility** in Wellington has a total site **GLA** of 50,000 m². This site **GLA** includes a regional office with a total **GLA** of 4,000 m². There are two levels in the regional office which have the following areas:

- a) *Ground level:* Operations offices, cafeterias and amenities.
- b) *Level 1:* National operations office area and a suite of meeting rooms.

In this example, it is unclear whether the whole regional office, or part of the regional office, provides direct support to the operation of the **warehouse facility**. However, since the total **GLA** of the regional office is less than 5,000 m², the **Assessor** includes all of the office area and its associated energy consumption.

Example 2: A **warehouse facility** in Wellington has a total site **GLA** of 45,000 m². This site **GLA** includes a regional office with a total **GLA** of 6,000 m². There are two levels in the regional office which have the following areas:

- a) *Ground level:* Operations offices, cafeterias and amenities.
- b) *Level 1:* National operations office area and a suite of meeting rooms.

In this example, it is unclear whether the whole regional office, or part of the regional office, provides direct support to the operation of the **warehouse facility**. However, since the total **GLA** of the regional office is more than 5,000 m², the **Assessor** needs to exclude all of the office area and its associated energy consumption.

5.5 Rated site area

The **rated site area** is calculated by subtracting the areas to be excluded from the total site **GLA**. This is done automatically by the **NABERSNZ rating input form**.

6 Refrigerated spaces volume

6.1 General

Refrigerated spaces are benchmarked based on the volume of each type of **refrigerated space**. The bigger the volume of the space, the higher the benchmark emissions.

Cold rooms and **cool rooms** must be identified separately due to the difference in their energy intensities.

Note: Where a **warehouse facility** does not have any **refrigerated spaces**, the **cold room** volume and **cool room** volume rating inputs will be set to 0 m³. This is a common situation for warehouses that only have **conditioned** and **non-conditioned areas**.



For documentation requirements, see Section 12.3.

6.2 Process overview

The process for determining **refrigerated areas** and calculating the rated **cold room** and **cool room** volumes must be in accordance with Table 6.2.

Table 6.2: Determining rated cold room and cool room volumes

Step	Task	Reference
1	Identify cold rooms and cool rooms in the rated premises .	Section 6.3.1
2	Determine area of each cold room and cool room .	Section 6.3.2
3	Measure height of each cold room and cool room .	Section 6.3.3
4	Calculate volume of each space from the area and height.	Section 6.3.4
5	Adjust for any time periods when the cold room or cool room was not operational to give the rated volume.	Section 6.4

6.3 Area, height and volume of each refrigerated space

6.3.1 Identify cold rooms and cool rooms

In NABERSNZ Energy for Warehouses and Cold Stores ratings, **cold rooms** and **cool rooms** must be identified separately. The **Assessor** must survey the **rated premises** for the presence of **cold rooms** and **cool rooms**.

A **refrigerated space** is classified as a **cold room** if the refrigeration system was operating during the whole or part of the **rating period** and the temperature setpoint of the space is between -20 °C and 0 °C.

A **refrigerated space** is classified as a **cool room** if the refrigeration system was operating during the whole or part of the **rating period** and the temperature setpoint of the space is between 0 °C and 15 °C.



For documentation requirements, see Section 12.3.1.

6.3.2 Determining area of each cold room and/or cool room

The total **cold room** and **cool room** area must be verified by the **Assessor** to have been measured in compliance with the **measurement standard for the rated area**, by one of the following methods:

- Reference to a third-party document, such as survey or lease documentation.
- Direct measurement of the area from current scaled plans or scaled prints.

Regardless of the method used to determine the **cold room** and **cool room** area, the **Assessor** must ensure that the information accurately reflects the configuration of the **rated premises** and its uses during the **rating period**.

Where the **Assessor** is unable to provide documentary evidence that the direct measurement is based on scaled plans or prints, the **cold room** and **cool room** area must be included in the **potential error** measurement.

Note: Direct site measurements to determine **cold room** and/or **cool room** area is not recommended due to work, health and safety concerns in low temperatures. **Assessors** should check with the **Administrator** if the **potential error** is exceeded due to lack of third-party documentation or scaled drawings.



For documentation requirements, see Section 12.3.2.

6.3.3 Determining height of each cold room and/or cool room

The height of each space must be verified by the **Assessor**, by one of the following methods (listed in order of preference):

- Direct measurement of the height from current to-scale site section drawings showing the height of the **cold room** and/or the **cool room**.
- Direct measurement on site. Site direct measurement by the **Assessor** is subject to site's WHS requirements and approvals.

- c) A list of areas and associated volumes for **cold rooms** and **cool rooms** provided by a credible and responsible person (including their full name, position and contact details), and verified by the **Assessor** independently on site.

Where the **Assessor** is unable to provide documentary evidence of height, the **cold room** and **cool room** height must be included in the **potential error**.

Where a pitched roof exists, the height must be measured at the mid-point of the pitched roof slope. See Appendix C for measurement guidance.



For documentation requirements, see Section 12.3.3.

6.3.4 Calculating volume of each cold room and/or cool room

The volume of each **refrigerated space** is calculated by multiplying the area by the height.

6.4 Adjustments for operational period

If the **cold room** or **cool room** did not operate for the full duration of the **rating period**, the **Assessor** must determine the number of days that the space was not in operation.

The **operational period** is confirmed using the following methods (listed in order of preference):

- Reference to site operational manuals or documentation that specifies the **operational period** for the particular **cold room** or **cool room**. The **operational period** must be independently verified by the **Assessor** during site visit; e.g. by sighting a refrigeration system controller graphic or **SCADA** system displaying the programmed schedule.
- Written confirmation of the **operational period** provided by a credible and responsible person, including their full name, position and contact details.

The proportion of the **rating period** during which each **cold room** or **cool room** was operational is used as an adjustment factor when determining the **cold room** or **cool room** volume.

Note: If there is uncertainty about the volume or closure periods of any **cold room** or **cool room**, the **Assessor** can use **acceptable estimates**, and they will contribute to the **potential error** measurement.

Example: A **cold room** is not operational over winter for 130 days across a **rating period** of 365 days. Therefore, it was only in operation for 235 days. The rated volume for this **cold room** is obtained by multiplying the volume by the factor 235/365.



For documentation requirements, see Section 12.3.4.

7 Rated hours

7.1 General

In NABERSNZ Energy for Warehouses and Cold Stores ratings, the weekly operating hours is a variable which impacts the energy consumption in a facility. The weekly operating hours must be correctly determined to calculate the rated hours and to allow for fair comparison.

The **Assessor** only needs to identify the rated hours for **non-refrigerated areas**.

 For documentation requirements, see Section 12.4.

7.2 Process overview

The process for determining the rated hours must be in accordance with Table 7.2.

Table 7.2: Determining rated hours

Step	Task	Reference
1	Divide non-refrigerated areas into different operational areas .	Section 7.3.2
2	For each operational area , conduct a warehouse operational survey (WOS) .	Section 7.3.3
3	If a WOS cannot be completed, estimate the average operational hours .	Section 7.3.4
4	Calculate the rated hours.	Section 7.3.5

7.3 Determining rated hours

7.3.1 Non-refrigerated area

The **Assessor** must determine the area of **non-refrigerated areas** on the premises.

7.3.2 Operational areas

Operational areas are a group of areas that have the same **operational hours**. **Non-refrigerated areas** must be divided into **operational areas** in order to account for differing **operational hours** across the **non-refrigerated area**.

Operational areas will need to be identified in discussions with site personnel and/or with reference to site plans and descriptions of activities undertaken within the warehouse. Where multiple **operational areas** are identified, the **Assessor** should determine the **GLA** for each **operational area** using one of the methods listed under Section 5.3.

Note: The **non-refrigerated area** in the **rated premises** does not need to be further separated into smaller **operational areas** if all the **non-refrigerated area** has the same **operational hours**.

 For documentation requirements, see Section 12.4.1.

7.3.3 Conducting a Warehouse Operational Survey (WOS)

7.3.3.1 General

Once all **operational areas** are identified, the **Assessor** conducts a **WOS** to determine the **operational hours** for each **operational area**. The **operational hours** are the total number of hours per week that the space is used by workers.

Example: An **operational area** has two worker shifts per day, 7 days per week. Shift 1 starts at 8 am and ends at 4 pm, while Shift 2 starts at 10 am and ends at 6 pm.

Although both shifts are 8 hours long, they overlap for several hours. The hours during which any workers are using the space is 8 am to 6 pm daily, i.e. 10 hours per day.

The **operational hours** are 70 hours per week.

7.3.3.2 Standard for acceptable data

For each **operational area**, a **WOS** must be completed by a manager or supervisor who works in the **rated premises** and has specific knowledge of the worker shifts and occupancy levels in each space. The **WOS** template is provided in Appendix D.

A **WOS** must be completed for the following:

- a) Each **operational area**.
- b) Each distinct period where the hours of operation or the number of shifts in an **operational area** changed during the **rating period**.

A **WOS** is invalid if either of the following occurs:

- 1) Survey does not verify that the source of information is an operations manager or workforce manager responsible for managing work shifts over the full course of the **rating period**.
- 2) Survey has missing or ambiguous data. This includes omitting the name, position or contact number of the manager who provided the information; the date range applying to the survey; or failing to clearly identify the **operational area**.

Preference is given to a **WOS** directly completed and signed by the manager or supervisor of the space. However, documentation provided by an **Assessor** resulting from interaction with the manager or supervisor of the space is also acceptable.

Note 1: The **WOS** is only required for the **non-refrigerated area**. In most cases, **warehouse supporting facilities**, such as adjacent offices, can be considered to have the same operating hours as the general warehouse and/or cold stores. They do not need to be surveyed separately.

In cases where offices are adjacent to cold stores and serve as supporting facilities, the shift hours of the cold stores are valid for the offices.

In cases where offices are supporting facilities for warehouses and cold stores with different shift hours, the offices should be surveyed separately.

Note 2: When an **operational area** includes both a **conditioned area** and a **non-conditioned area**, they need to be entered on separate lines in the **NABERSNZ rating input form** although they belong to the same **operational area** with one **WOS**.



For documentation requirements, see Section 12.4.2.

7.3.4 Average operational hours

An **Assessor** may estimate the average **operational hours** for an **operational area** if a **WOS** cannot be completed.

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



For documentation requirements, see Section 12.4.3.

7.3.5 Rated hours

The **rated hours** for the **warehouse facility** are the area-weighted average of the weekly **operational hours** from the **WOS** of all **operational areas**.

Once the **Assessor** has entered the **operational area** and **operational hours** in the **NABERSNZ rating input form**, the **rated hours** will be automatically calculated.

8 Non-refrigerated areas

8.1 General

For NABERSNZ Energy for Warehouses and Cold Stores ratings, the **non-refrigerated area** needs to be divided into **conditioned area** and **non-conditioned area**.

Conditioned area represents the portion of the **rated site area** that is provided with air-conditioning services by mechanical plant, while the **non-conditioned area** represents the portion of the **rated site area** that does not have any air-conditioning services at the **rated premises**. These figures are used to provide a meaningful comparison among sites that provide different service coverage to the **rated premises**.

Conditioned area is part of the **non-refrigerated area**, and it excludes **refrigerated areas** (**cold room** and **cool room** areas) calculated in Section 6.3.2. This chapter therefore only applies to the area of the site that is not refrigerated.

Note: Where a **warehouse facility** does not have any **conditioned area**, the **conditioned area** rating input should be set to 0 m².

 For documentation requirements, see Section 12.5.

8.2 Process overview

The process for determining the rated **conditioned area** and the rated **non-conditioned area** must be in accordance with Table 8.2.

Table 8.2: Determining rated conditioned area and rated non-conditioned area

Step	Task	Reference
1	Determine rated site area .	Chapter 5
2	Exclude any cold room and cool room areas.	Section 8.3
3	Determine rated conditioned area .	Section 8.4
4	Determine rated non-conditioned area .	Section 8.5

8.3 Exclude cold and cool room areas

After determining the area of any **cold rooms** and **cool rooms** located in the premises in accordance with Section 6.3.2, the **Assessor** must then subtract these **refrigerated areas** from the **rated site area** to determine the **non-refrigerated areas**.

8.4 Determining rated conditioned area

8.4.1 General

In NABERSNZ Energy for Warehouses and Cold Stores ratings, the impact of air-conditioning services is accounted for through determining the **conditioned area**.

A **non-refrigerated area** is classified as a **conditioned area** if the following occurs:

- The space has any **heating, ventilation, air-conditioning (HVAC)** and cooling services designed to control the temperature to ensure comfort conditions for either human occupation or product quality.
- HVAC** services operate at least 60 days in a year.
- The space is part of the **rated site area**.
- Energy usage associated with the space is downstream of the rated metered consumption.

The **Assessor** must survey the **rated premises** for the presence of **conditioned areas**.

Example: If **HVAC** services in a space are only conditioned for a total of 40 days during the **rating period**, the affected area is considered to be non-conditioned.

 For documentation requirements, see Section 12.5.1.

8.4.2 Determining conditioned area

The **conditioned area** 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 document, such as survey or lease documentation.
- Direct measurement of the area from current scaled plans or scaled prints.
- Site measurements verified by the **Assessor** identifying the **conditioned area**.

Regardless of the method used to determine the **conditioned area**, the **Assessor** must ensure that the information accurately reflects the configuration of the **rated premises** and its uses during the **rating period**.

Where the **Assessor** is unable to provide evidence in accordance with the documentation requirements, the **conditioned area** must be included in the **potential error** measurement.

 For documentation requirements, see Section 12.5.2.

8.4.3 Adjustment for unoccupied spaces

Occupation days are used as adjustment factors to calculate the rated **conditioned area**. For NABERSNZ Energy for Warehouses and Cold Stores ratings, the number of occupation days for the **conditioned area** is the number of days the space was **occupied** and used as **warehouse facilities**.

If the **conditioned area** has different occupation days for different areas, the **conditioned area** must be split so the occupation days can be entered separately.

 For documentation requirements, see Section 12.5.3.

8.5 Determining rated non-conditioned area

8.5.1 General

In NABERSNZ Energy for Warehouses and Cold Stores ratings, the **non-conditioned area** needs to be determined in addition to **conditioned area** to account for the associated emissions.

8.5.2 Determining non-conditioned area

The **non-conditioned area** 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 document, such as survey or lease documentation.
- Direct measurement of the area from current scaled plans or scaled prints.
- Site measurements verified by the **Assessor** identifying the **non-conditioned area**.

Regardless of the method used to determine the **non-conditioned area**, the **Assessor** must ensure that the information accurately reflects the configuration of the **rated premises** and its uses during the **rating period**.

Where the **Assessor** is unable to provide evidence in accordance with the documentation requirements, the **non-conditioned area** must be included in the **potential error** measurement.

 For documentation requirements, see Section 12.5.2.

8.5.3 Adjustment for unoccupied spaces

Occupation days are used as adjustment factors to calculate the rated **non-conditioned area**. For NABERSNZ Energy for Warehouses and Cold Stores ratings, the number of occupation days for the **non-conditioned area** is the number of days the space was **occupied** and used as **warehouse facilities**.

If the **non-conditioned area** has different occupation days for different areas, the **non-conditioned area** must be split so the occupation days can be entered separately.

 For documentation requirements, see Section 12.5.3.

9 Full-time equivalent workers

9.1 General

In NABERSNZ Energy for Warehouses and Cold Stores ratings, the potential impact of site activity intensity is accounted for by determining the number of **full-time equivalent (FTE) workers**.

The number of **FTE workers** includes both permanent full-time employees as well as other employment arrangements such as casuals, independent contractors or shift workers with variable hours.

 For documentation requirements, see Section 12.6.

9.2 Process overview

The process for determining the number of **FTE workers** must be in accordance with Table 9.2.

Table 9.2: Determining number of FTE workers

Step	Task	Reference
1	Determine number of full-time workers.	Section 9.3.2
2	Calculate number of non-full-time workers to FTE workers .	Section 9.3.3
3	Calculate rated FTE workers .	Section 9.3.4

9.3 Determining number of FTE workers

9.3.1 General

NABERSNZ Energy for Warehouses and Cold Stores ratings recognise the impact of full-time, part-time and casual workers as well as workers with variable hours on the intensity of site activities. The number of **FTE workers** is the sum of the number of full-time workers and the number of full-time equivalents for non-full-time workers.

Note: Drivers who operate between warehouses are not included in the calculation of **FTE workers** in NABERSNZ Energy for Warehouses and Cold Stores ratings.

9.3.2 Determining number of full-time workers

The **Assessor** must obtain records of full-time workers from the human resources department of the business or businesses occupying the **rated premises**.

The number of full-time workers must be equal to the total count of full-time workers on the business's records throughout the full **rating period**. Where a full-time worker began or ended employment partway through the **rating period**, the method in Section 9.3.3 should be applied to calculate the **FTE workers**.

Example: A **warehouse facility** is being rated for NABERSNZ Energy for Warehouses and Cold Stores. The site contact provides records of 15 full-time workers in the previous 12 months. One of these workers was hired halfway through the **rating period**, and another worker resigned 2 months before the end of the **rating period**.

The number of full-time workers for the **rated premises** is 13. The two workers who only worked for part of the **rating period** will be converted to **FTE workers** using the method in Section 9.3.3.

 For documentation requirements, see Section 12.6.1.

9.3.3 Calculating number of non-full-time workers to FTE workers

A site may have part-time, casual or shift workers. The **Assessor** must determine the equivalent number of **FTE workers** for part-time, casual or shift workers.

The **Assessor** must obtain records for part-time, casual or shift workers from the human resources department showing either the contracted hours or working hours log.

The accepted evidence types include one of the following:

- Records of part-time, casual or shift workers, contracted weekly working hours and the contract start date and end date.
- Annual working hours logs that are used for accounting purposes for each part-time, casual or casual worker.

The method for calculating the number of **FTE workers** is as follows:

$$FTE\ workers = \sum_{i=1}^n \frac{Annual\ total\ working\ hours}{1976}$$

Example 1: A **warehouse facility** is being rated for NABERSNZ Energy for Warehouses and Cold Stores. The site contact provides records of 30 part-time workers. The records show the contracted weekly hours are 22.5 hours for each part-time worker during the **rating period**.

However, two of the part-time workers only worked 2 weeks at the start of the **rating period**. This means 28 of the 30 part-time workers worked 52 weeks during the **rating period**, and the two other part-time workers worked only 2 weeks.

The **Assessor** uses this information to calculate the **FTE workers** as follows:

$$FTEs\ workers\ for\ part-time\ workers = \frac{28 \times 22.5 \times 52 + 2 \times 22.5 \times 2}{1976} = 16$$

Therefore, the rated number of **FTE workers** for these 30 part-time workers is 16.

Example 2: For the same **warehouse facility**, the site contact also provides monthly working hours for casual workers. The total working hours during the **rating period** for these casual workers is 39,520 hours.

The **Assessor** uses this information to calculate the **FTE workers** for these casual workers as follows:

$$FTEs\ workers\ for\ casual\ workers = \frac{39,520}{1976} = 20$$

Therefore, the rated number of **FTE workers** for these casual workers is 20.

Example 3: The **warehouse facility** from the example in Section 9.3.2 has two full-time workers who only worked for part of the **rating period**. One worker was employed for 6 months (26 weeks) of the **rating period**, and the other was employed for 10 months (43 weeks) of the **rating period**.

The **Assessor** uses this information to calculate the **FTE workers** as follows:

$$FTEs\ workers\ from\ previous\ section = \frac{38 \times 26 + 38 \times 43}{1976} = 1.3$$

Therefore, the rated number of **FTE workers** for the two workers from Section 9.3.2 is 1.

Note: If the records of full-time workers cannot be obtained as per Section 9.3.2, the method outlined in this section using annual working hour logs can also be used to determine the number of full-time workers.



For documentation requirements, see Section 12.6.2.

9.3.4 Calculating rated FTE workers

Once the number of full-time workers and the **FTE workers** for non-full-time workers have been determined, the rated **FTE workers** is calculated using the following formula:

$$Rated\ FTE\ workers = Full-time\ workers + FTE\ workers\ for\ non-full-time\ workers$$

If data for any of the inputs in the formula above cannot be obtained, the **Assessor** must use “0” as the value in the input.

Example: A **warehouse facility** is being rated for NABERSNZ Energy for Warehouses and Cold Stores. The site contact provides a record of all the full-time workers showing that the total number is 55.

The site contact also provides the record of working hours for part-time workers and casual workers. The number of FTE part-time and casual workers was calculated to be 36.

Therefore, the rated **FTE workers** is 91.

10 Annual turnover ratio

10.1 General

In NABERSNZ Energy for Warehouses and Cold Stores ratings, the impact of site activity intensity can also be determined through the **annual turnover ratio** as an alternative to **FTE workers**. The annual turnover must be correctly determined to allow for fair comparison. Warehouses with a higher annual turnover will be allocated a higher emissions benchmark, which will mean that for the same star rating they can use more energy.

Note: In NABERSNZ Energy for Warehouses and Cold Stores ratings, either **FTE workers** or **annual turnover ratio** can be used to quantify the impact of site activities.

For sites that are highly automated and therefore have fewer **FTE workers**, **annual turnover ratio** may be a better option to give a more accurate rating outcome than the **FTE workers** option.

 For documentation requirements, see Section 12.7.

10.2 Process overview

The process for determining the **annual turnover ratio** must be in accordance with Table 10.2.

Table 10.2: Determining annual turnover ratio

Step	Task	Reference
1	Determine annual product throughput.	Section 10.3.2
2	Determine maximum monthly average inventory level.	Section 10.3.3
3	Calculate annual turnover ratio .	Section 10.3.4

10.3 Determining annual turnover ratio

10.3.1 General

In NABERSNZ Energy for Warehouses and Cold Stores ratings, **annual turnover ratio** is calculated using the following data sources:

- Annual product throughput data.
- Inventory level data.

The annual product throughput data and inventory level data should be for the whole **rated premises**. If there are multiple sets of annual product throughput data and inventory level data for different areas, then the aggregation of these two inputs is used to calculate the **annual turnover ratio**.

Note: The NABERSNZ Energy for Warehouse and Cold Stores rating tool allows multiple streams of annual product throughput data and inventory level data to be used to calculate the **annual turnover ratio** for the **rated premises**. The units of measurement for the annual product throughput data and inventory level data need to be the same across different streams.

If the units of measurement are different, the **Assessor** must contact the **Administrator** for approval of an alternative method.

10.3.2 Determining annual product throughput

The following requirements for determining annual product throughput data are:

- a) Annual product throughput data must cover the 12-month **rating period**.
- b) Minimum interval recorded for annual product throughput data must be monthly.
- c) Annualised product throughput is calculated as the average of the inbound product throughput and the outbound product throughput as follows:

$$\text{Annual product throughput} = \frac{(\text{Annual inbound product throughput}) + (\text{Annual outbound product throughput})}{2}$$

- d) Unit of measurement (e.g. tonnes, parcels, pallets) used for annual product throughput must be identical to the those used for inventory level data, see Section 10.3.3.

Note: The inbound product throughput data refers to the throughput that is recorded when arriving at the **warehouse facility**. The outbound product throughput data refers to the throughput that is recorded when leaving the **warehouse facility**.

Over a long period of time, the inbound product throughput data and the outbound product throughput data should maintain a balance. Therefore, the average of the inbound data and the outbound data is used for the rating input for the product throughput.

10.3.3 Determining maximum monthly average inventory level

Data for site inventory levels are used to calculate the **annual turnover ratio**.

The **Assessor** must obtain records or documentation from the site to demonstrate the maximum inventory level. The accepted evidence types include the following:

- a) Site documentation showing the maximum inventory level for the **rating period** recorded in the same unit of measurement as annual product throughput.
- b) Written confirmation of the maximum inventory level for the **rating period**, recorded in the same unit of measurement as annual product throughput. This information must be provided by a credible and responsible person, including their full name, position and contact details.

10.3.4 Calculating annual turnover ratio

Annual turnover ratio is calculated using the following formula:

$$\text{Annual turnover ratio} = \frac{\text{Annual product throughput}}{\text{Maximum inventory level}}$$

The **annual turnover ratio** is calculated automatically by the **NABERSNZ rating input form**.

Example: A cold store with two **cold rooms** is being rated for NABERSNZ Energy for Warehouses and Cold Stores.

The site operations manager provided monthly breakdowns for the inbound product throughput data and outbound product throughput data for 12 months in the **rating period**, and the monthly inventory level across 12 months.

The annualised product throughput during the **rating period** was calculated to be 80,000 pallets. The monthly inventory level data shows that the maximum monthly inventory level was 9,600 pallets during the **rating period**.

In this case, the **annual turnover ratio** calculated by the **NABERSNZ rating input form** is:

$$\frac{80,000}{9,600} = 8.3$$

Therefore, the **annual turnover ratio** is calculated to be 8.3.

11 Minimum energy coverage

11.1 General

Correctly interpreting the scope of energy supply and consumption data is essential to the accuracy of NABERSNZ ratings. The key principles are as follows:

- a) An assessment for an accredited rating must include all sources of external energy supplied to the **rated premises** and must cover all of the energy **end uses** specified for the rating.
- b) **Utility** and non-**utility metering systems** that meet the requirements of *NABERSNZ The Rules — Metering and Consumption* may be used in any combination to achieve the required coverage, subject to the accuracy requirements of Section 3.4.

This chapter is to be read in conjunction with Chapter 4 of *NABERSNZ The Rules — Metering and Consumption*.

Note: For minimum energy requirements in relation to shared services, refer to *NABERS Ruling — Shared Services and Facilities*.

 For documentation requirements, see Section 12.8.

11.2 Minimum energy end uses coverage

11.2.1 General

Once the energy sources and their supply points have been determined, **Assessors** must ensure that all the required energy **end uses** (as outlined in this chapter) are covered by the sources and supply points identified in accordance with Chapter 4 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 specified in Chapter 8 of *NABERSNZ The Rules — Metering and Consumption* to ensure the minimum energy coverage requirements can be met.

Any exclusion must only cover the specific item being excluded. Exclusions must not cover **end uses** that are supposed to be included as minimum energy coverage. Therefore, every item to be excluded must be assessed separately and the justification for its exclusion included in the documentation.

The **Assessor** must examine available single-line diagrams, electrical circuit schedules and visit the plant rooms to ensure that all relevant equipment is covered under the meters included in the energy rating.

 For documentation requirements, see Section 12.8.1.

11.2.2 Coverage

11.2.2.1 Multi-building or whole building energy rating

A multi-building or whole building energy rating applies where the **rated premises** is a tenancy or tenancies occupying the whole building or multiple buildings within a precinct.

The required minimum energy coverage is energy consumed in supplying all services to the **rated premises** during the **rating period**. This energy coverage includes the following:

- a) All lighting and power in the **warehouse facility**, such as the following:
 - 1) Warehouse.
 - 2) **Cold room**.
 - 3) **Cool room**.
 - 4) Communal areas.
 - 5) Staff rooms.
 - 6) Foyers.
 - 7) Plant rooms.
 - 8) Common-area toilets.
 - 9) Kitchens.
 - 10) Offices as support facilities.
- b) Domestic hot water.
- c) Lifts and escalators.
- d) All air conditioning and ventilation to all areas within the **warehouse facility** (i.e. conditioned warehouse and conditioned support facilities), including the following:
 - 1) Heating.
 - 2) Cooling.
 - 3) Heat rejection plant.
 - 4) Air distribution and movement.
 - 5) Outside air.
 - 6) Miscellaneous exhaust, supply or ventilation fans.
- e) Refrigeration plant to all areas within the **warehouse facility**, including the following:
 - 1) Cooling and cooling distribution.
 - 2) Heat rejection plant.
 - 3) Air distribution and movement.
- f) Internal transport that is for the internal operation of the **warehouse facility**, and does not leave the site premises.

- g) Exterior lighting provided to the **warehouse facility**.
- h) Generator fuel where it serves the **warehouse facility**.
- i) Car park ventilation and lighting, where internal or external car parks supports the operation of the **warehouse facility**.
- j) Exterior signage that—
 - 1) is primarily used for identifying or advertising the warehouse and cold store owner or tenant; or
 - 2) displays the **rated premises'** name, even if unrelated to the warehouse and cold store owner or lessee.
- k) Sump pits and hydraulic pumping which serve the **rated premises**.
- l) Kitchens, cafes, canteens and other support facilities in communal areas that are for the exclusive use of the staff at the **rated premises**.
- m) Any specialised equipment used to service the **warehouse facility**.

11.2.2.2 Part-building energy rating

A part-building energy rating applies where the **rated premises** is a tenancy within one building that is shared with other tenancies.

The required minimum energy coverage is energy consumed in supplying all services to the **rated premises** during the **rating period**. This energy coverage includes the following:

- a) All lighting and power in the **rated premises**, e.g. warehouse, **cold room**, **cool room**, communal areas, staff rooms, foyers, plant rooms, common-area toilets, kitchens, domestic hot water, and offices as support facilities.
- b) Lifts and escalators for the exclusive use of the **rated premises**.
- c) All air conditioning and ventilation to all areas within the **rated premises** (i.e. conditioned warehouse and conditioned support facilities), including the following:
 - 1) Heating.
 - 2) Cooling.
 - 3) Heat rejection plant.
 - 4) Air distribution and movement.
 - 5) Outside air.
 - 6) Miscellaneous exhaust, supply or ventilation fans.
- d) Refrigeration plant to all areas within the **rated premises**, including the following:
 - 1) Cooling and cooling distribution.
 - 2) Heat rejection plant.
 - 3) Air distribution and movement.
- e) Internal transport that is for the internal operation of the **rated premises**, and does not leave the boundaries of the **rated premises**.
- f) Exterior lighting provided to the **rated premises**.

- g) Generator fuel where it serves the **rated premises**.
- h) Exterior signage that—
 - 1) is primarily used for identifying or advertising the tenant; or
 - 2) displays the **rated premises'** name.
- i) Kitchens, cafes, canteens and other support facilities in communal areas that are for the exclusive use of the staff at the **rated premises**.
- j) Any specialised equipment used to service the **warehouse facility**.

11.2.3 Energy use in unoccupied or disused spaces

The energy use of unoccupied or disused spaces (within the scope of the required minimum energy coverage of the rating) must always be included in the rating.

11.2.4 Exclusions

11.2.4.1 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.



For documentation requirements, see Section 12.8.2.

11.2.4.2 Manufacturing

The energy associated with manufacturing does not form part of the minimum energy coverage and is not required to be included.

11.2.4.3 Blast freezers

The energy associated with blast freezers does not form part of the minimum energy coverage and is not required to be included.

Note: The NABERSNZ Energy for Warehouses and Cold Stores rating tool excludes the energy consumption for blast freezers. This is because blast freezers transform goods from one state to another. The minimum energy consumption for warehouses and cold stores does not cover any energy associated with transforming goods.

11.2.4.4 External transport

The energy associated with external transport does not form part of the minimum energy coverage and is not required to be included.

Note: This section applies to electric cars that are used outside of the **rated premises**. The energy consumption associated with the electric car charging is not part of the minimum energy consumption.

The energy for internal transport used within the **rated premises** such as electric forklifts must be included in the rating.

11.2.4.5 Non-warehouse facilities

Energy use associated with non-**warehouse facilities** which are—

- a) not for the direct support of the operation of the warehouse; and
- b) not included in the **rated site area** calculation,

may be excluded from the energy coverage if—

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



For documentation requirements, see Section 12.8.3.

12 Documentation required for accredited ratings

12.1 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 12.2 to 12.8 is required for a rating. It is organised based on the divisions of previous chapters, see Chapters 5 to 11. All the required information should be obtained from the building 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.

12.2 Documentation required for Chapter 5: Rated site area

Topic	Requirements	Documentation
12.2.1 Total site GLA	Section 5.3	<i>Required information</i> The Assessor must retain evidence that the total site GLA has been correctly calculated and verified. All documentation used as evidence must be determined in accordance with the measurement standard for rated area, otherwise it will contribute to the potential error measurement. <i>Documentation examples</i> Documentation that can be used as evidence includes the following: a) Surveys. b) Leases (including information about the measurement standard or equivalent). c) Other third-party documentation. d) Direct measurement from drawings, plans or prints (to-scale). e) 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.
12.2.2 Area exclusions	Section 5.4	<i>Required information</i> The Assessor must retain evidence that the area exclusion has been correctly calculated and verified. All documentation used as evidence must be determined in accordance with the measurement standard for rated area, otherwise it will contribute to the potential error measurement. <i>Documentation examples</i>

		Documentation that can be used as evidence includes the following: a) Surveys. b) Leases (including information about the measurement standard or equivalent). c) Other third-party documentation. d) Direct measurement from drawings, plans or prints (to-scale). e) 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.
12.2.3 Area without consumption data	Section 5.4.2	Where either a whole or a part of an area 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.

12.3 Documentation required for Chapter 6: Refrigerated spaces volume

Topic	Requirements	Documentation
12.3.1 Identify cold rooms and cool rooms	Section 6.3.1	<i>Required information</i> The Assessor must retain evidence that the cold rooms and cool rooms have been correctly identified. <i>Documentation examples</i> To confirm the presence of cold rooms and cool rooms, one of the following is required (in order of preference):

		a) Reference to a site operational manual or documentation that specifies services for the cold rooms and/or cool rooms. The services must be independently verified by the Assessor during site visit, for example by sighting a refrigeration system controller graphic displaying the temperature setpoint or temperature setpoints from SCADA system; or b) Confirmation of the temperature setpoints 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.
12.3.2 Determining area of each cold room and/or cool room	Section 6.3.2	<i>Required information</i> The Assessor must retain evidence that the area of each cold room and/or cool room has been correctly calculated and verified. All documentation used as evidence must be determined in accordance with the measurement standard for rated area, otherwise it will contribute to the potential error measurement. <i>Documentation examples</i> Documentation that can be used as evidence includes the following: a) Surveys. b) Leases (including information about the measurement standard or equivalent). c) Other third-party documentation. d) Direct measurement from drawings, plans or prints (to-scale). e) Site direct measurement by the Assessor subject to the site's WHS requirements and approvals. All of the documentation listed above must be made to/based on the measurement standard for rated area.

12.3.3 Determining height of each cold room and/or cool room	Section 6.3.3	<i>Documentation examples</i> To confirm the height of each cold room and/or cool room, one of the following is required (in order of preference): a) Direct measurement of the height from current to-scale site section drawings showing the height of the cold room and/or the cool room. b) Direct site measurement on-site using laser distance measurement devices. Site direct measurement by the Assessor is subject to the site's WHS requirements and approvals. c) A list of areas and associated height for cold rooms and cool rooms provided by a credible and responsible person (including their full name, position and contact details), and verified by the Assessor independently on site. The Assessor needs to verify at least 20 % of the total cold room and cool room volume. The tolerance of the volume of each individual room needs to be within ± 10 %. The Assessor must verify different samples for each subsequent rating. Where the Assessor is unable to provide documentary evidence of height, the cold room and cool room height will contribute to the potential error measurement.
12.3.4 Adjustments for operational period	Section 6.4	<i>Documentation examples</i> To confirm the operational period for each cold room and/or cool room, one of the following is required (in order of preference): a) Reference to a site operational manual or documentation that specifies the operational period. The operational period must be independently verified by the Assessor during site visit; e.g., by sighting a refrigeration system controller graphic displaying the operational schedule or operational schedules from SCADA system. b) Confirmation of the operational period provided by a credible and responsible person (including their full name, position and contact details), and recorded in writing by the Assessor.

12.4 Documentation required for Chapter 7: Rated hours

Topic	Requirements	Documentation
12.4.1 Operational areas	Section 7.3.2	<i>Required information</i> Operational areas should be measured in accordance with the measurement standard for rated area. The sum of all operational areas should equal to the sum of rated conditioned and non-conditioned areas. <i>Documentation examples</i> Documentation that can be used as evidence includes the following: a) Surveys. b) Leases (including information about the measurement standard or equivalent). c) Other third-party documentation. d) Direct measurement from drawings, plans or prints (to-scale). e) 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.
12.4.2 Conducting a Warehouse Operational Survey (WOS)	Section 7.3.3	<i>Required information</i> For the confirmation of the rated hours under this method, a completed and signed WOS for each operational area and shift must be retained.
12.4.3 Average operating hours	Section 7.3.4	<i>Required information</i> The Assessor must provide the following evidence:

		a) A WOS cannot be completed for an operational area. b) Average operating hours used are relevant to the operational area.
--	--	--

12.5 Documentation required for Chapter 8: Non-refrigerated areas

Topic	Requirements	Documentation
12.5.1 General	Section 8.4.1	<i>Documentation examples</i> To show evidence confirming the presence of conditioned areas, one of the following is required (in order of preference): a) Reference to a site operational manual or documentation that specifies services and the operational schedule of services provided for the conditioned area. The services and the operational schedule must be independently verified by the Assessor during on site visit, e.g. by sighting mechanical services equipment within the conditioned area and the HVAC trend logs. b) Verbal confirmation of the mechanical services and its operational schedule for the conditioned area provided by a credible and responsible person (including their full name, position and contact details), and recorded in writing by the Assessor.
12.5.2 Determining conditioned and non-conditioned area	Sections 8.4.2 and 8.5.2	<i>Required information</i> The Assessor must retain evidence that the conditioned and unconditioned areas have been correctly calculated and verified. All documentation used as evidence must be determined in accordance with the measurement standard for rated area, otherwise it will contribute to the potential error measurement. <i>Documentation examples</i> Documentation that can be used as evidence includes the following:

		a) Surveys. b) Leases (including information about the measurement standard or equivalent). c) Other third-party documentation. d) Direct measurement from drawings, plans or prints (to-scale). e) 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.
12.5.3 Adjustment for unoccupied spaces	Sections 8.4.3 and 8.5.3	<i>Required information</i> Documentation required for adjusting for unoccupied spaces includes the following: a) Area that is unoccupied during the rating period. b) Written evidence confirming the number of occupation days. This may include evidence showing that the space was leased and that the space was actively used for warehouse activities.

12.6 Documentation required for Chapter 9: Full-time equivalent workers

Topic	Requirements	Documentation
12.6.1 Determining number of full-time workers	Section 9.3.2	<i>Documentation examples</i> Documentation that can be used as evidence includes the following: a) Records of full-time workers from the human resources department. b) Written confirmation of the number of full-time workers provided by a credible and responsible person (including their full name, position and contact details), and recorded in writing by the Assessor.

		c) Annual working hours logs that are used for accounting purposes for each full-time worker.
12.6.2 Calculating number of non-full-time workers to FTE workers	Section 9.3.3	<i>Documentation examples</i> Documentation that can be used as evidence includes the following: a) Records of part-time or casual workers showing their contracted weekly working hours, and number of weeks contracted during the rating period. b) Annual working hours logs that are used for accounting purposes for part-time or casual workers. c) Working hours summary with at least a monthly interval, provided by a credible and responsible person (including their full name, position and contact details), and recorded in writing by the Assessor.

12.7 Documentation required for Chapter 10: Annual turnover ratio

Topic	Requirements	Documentation
12.7.1 Determining annual product throughput	Section 10.3.2	<i>Documentation examples</i> Documentation that can be used as evidence includes the following: a) Records of product throughput data showing both the inbound product throughput and the outbound product throughput — the interval has to be monthly or more granular. The unit has to be the same as the inventory level data. b) Written confirmation of the monthly inbound and outbound product throughput data provided by a credible and responsible person (including their full name, position and contact details), and recorded in writing by the Assessor.

12.7.2 Determining maximum monthly average inventory level	Section 10.3.3	<i>Documentation examples</i> Documentation that can be used as evidence includes the following: a) Records of product inventory data — the interval has to be monthly or more granular. The unit has to be the same as the product throughput data. b) Written confirmation of the inventory level data provided by a credible and responsible person (including their full name, position and contact details), and recorded in writing by the Assessor.
--	----------------	--

12.8 Documentation required for Chapter 11: Minimum energy coverage

Topic	Requirements	Documentation
12.8.1 Minimum energy end uses coverage	Section 11.2	<i>Required information</i> For documentation required to confirm minimum energy coverage, refer to Section 10.2.3 of <i>NABERSNZ The Rules — Metering and Consumption</i>.
12.8.2 Exclusions	Section 11.2.4	<i>Required information</i> The Assessor must retain data regarding any energy consumption that is excluded. This includes calculations and information relating to the energy use of the excluded area which is <u>not</u> predominantly for the operation of the warehouse facility. The Assessor must make reference to the metering and exclusion requirements of other NABERSNZ Rules documents, as appropriate. <i>Documentation examples</i> Documentation that can be used as evidence includes the following: a) Marked up electrical, gas or water reticulation diagram demonstrating the metering configuration of the excluded area.

		b) Assessor notes on the purpose and function of the excluded area, if not for the operation of the warehouse facility .
12.8.3 Non-warehouse facilities	Section 11.2.4.5	<i>Required information</i> For energy consumption in excluded spaces, the following must be retained: a) A comprehensive list of all spaces at the rated premises, whether or not the space is included or excluded from the rated site area calculation. b) Calculations and information relating to the energy use of spaces which do not directly support the operation of the warehouse facility, with reference to the metering and exclusion requirements of other NABERSNZ Rules documents, as appropriate.

Appendix A Rating period

A.1 Allowance for submission

A.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 A.1.2 and A.1.3 provide examples of this principle.

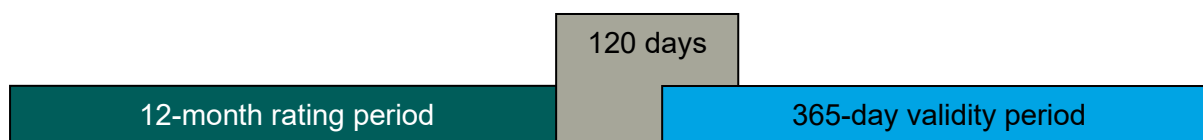
A.1.2 Scenario 1

A NABERSNZ rating is certified with 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 A.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 A.1.2: Rating certified within 120 days of end of rating period



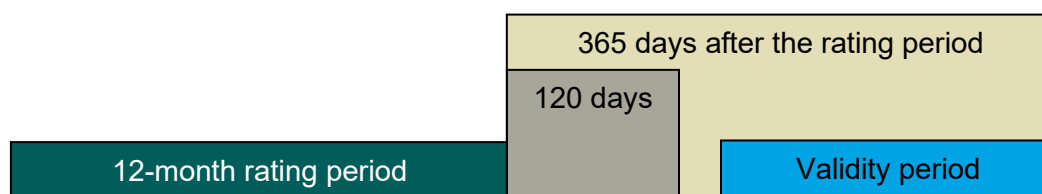
A.1.3 Scenario 2

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 A.1.3.

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 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 A.1.3: A rating certified after 120 days from end of rating period



A.2 Allowance for responses

A.2.1 General

Assessors are given 120 days after the **rating period** to submit ratings and be certified by **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 A.2.2 provides an example of this principle.

A.2.2 Scenario

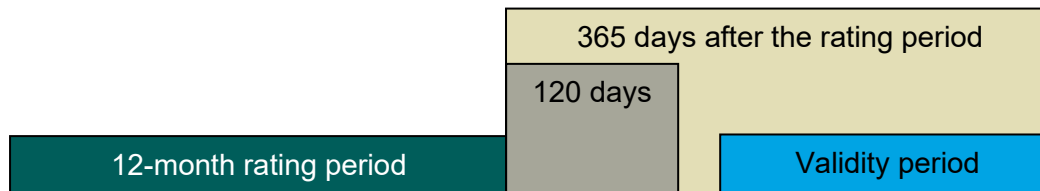
A NABERSNZ rating is submitted to the **Administrator** one day before the due date (120 days from the end of the **rating period**). The **Administrator** takes 7 calendar days to complete quality assurance checks, and the **Assessor** takes 6 calendar days to respond to queries that arose from the quality assurance checks. The rating will be valid for 365 days from the end of the **rating period**: see Figure A.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 1 December 2025 (234 days from the date of certification).

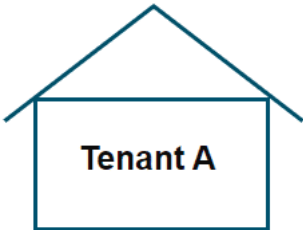
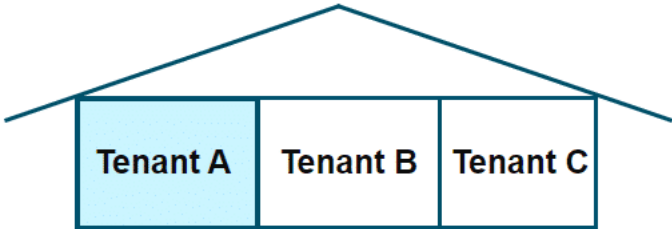
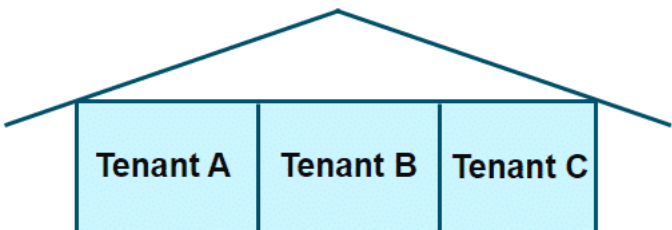
Figure A.2.2: A rating submitted before, but certified after 120 days from the end of the rating period



Appendix B Eligible rating configurations

The **rated premises** must be classified as one of the configurations shown in Table B.

Table B: Eligible rating configurations

One tenant company occupies one whole building	
One tenant company occupies multiple whole buildings (e.g. a precinct)	
One tenant company occupies part of a shared building	
A whole building with multiple tenants	

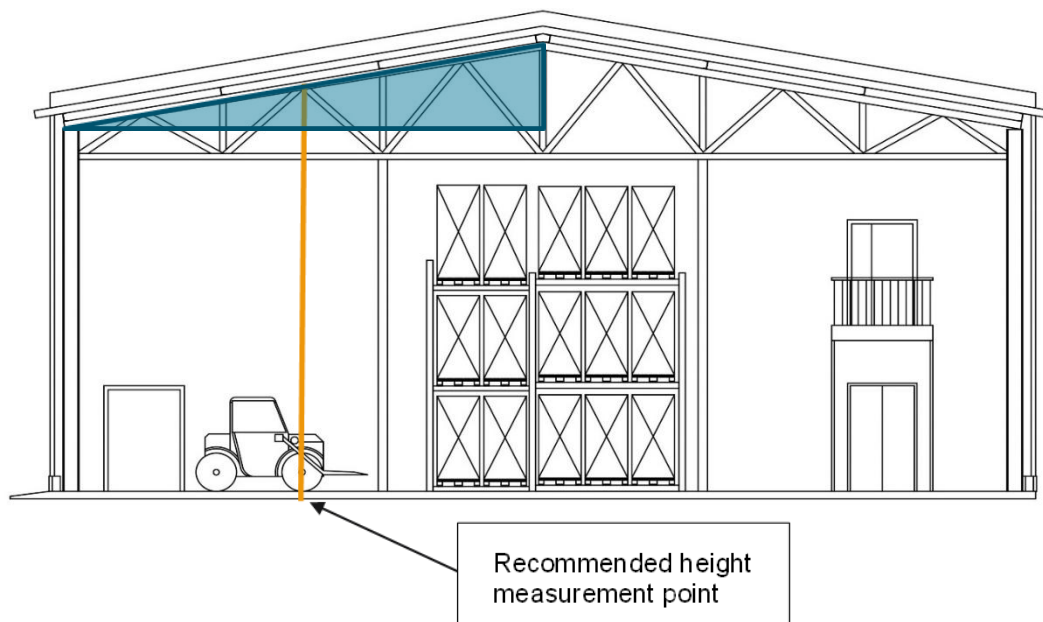
Note: Multiple whole buildings can be rated together if all buildings are owned by a single owner, even if there are multiple tenants.

Appendix C Pitched roof height measurement guide

The height of the **cold room** or **cool room** needs to be measured or verified by the **Assessor** during the on-site visit.

Where a pitched roof exists, the measurement point of the height should be the mid-point of the pitched roof slope, see Figure C. Where a roof is of a more complex shape, the **Assessor** may use the average of the maximum and minimum roof heights.

Figure C: Pitched roof height measurement



Appendix D Warehouse Operational Survey (WOS)

Note: The following form must be completed by a manager or supervisor who works in the **rated premises** and has specific knowledge of the worker shifts and occupancy levels in each nominated **operational area**.

At least one form must be printed and completed for each **operational area** and kept on file for auditing purposes.

The questions in this survey are aimed at determining, for the **rating period** shown below, the average number of hours per week in the **operational area** described.

This information is only used to assess the energy consumption and greenhouse gas performance of the **rated premises** relative to how many hours it is used.

Operational area:

Rating period: DD/MM/YYYY to DD/MM/YYYY

Name of manager/supervisor:

Position:

Location of staff under your supervision:

What are the typical days of work within the area?

How many shifts on a typical day within the area?

	Shift 1	Shift 2	Shift 3
What is the start time of the shift? ¹			
What is the end time of the shift? ²			

¹ When offices are surveyed separately, the start time of the shift means when 20 % (i.e. 1 in 5) of people have arrived within the area.

² When offices are surveyed separately, the end time of the shift means when there are approximately 20 % (i.e. 1 in 5) of people remaining in the area.

Describe any working periods outside these typical hours
(e.g. “4 h one Saturday each month” or “a total of 50 h at
the end of the financial year”):

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

If not, what period do the answers apply to?

Please give alternative responses for the
rest of the rating period:

Signature of manager/supervisor:

Date:

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