

Building Note 113

Energy Efficiency

Purpose

This building note replaces building note 68: BCA Energy Efficiency Provisions. It provides guidance to industry on the application of National Construction Code (NCC) energy efficiency provisions in the Northern Territory.

NCC energy efficiency provisions apply to all new building work, including alterations and additions to existing buildings in the Northern Territory (NT). The objectives of energy efficiency provisions include reducing energy consumption and greenhouse gas emissions, and improving occupant health and amenity.

Commercial Buildings

Commencing 1 October 2023, the NT adopted a variation under NCC 2022 that applies NCC 2019 Volume One Section J energy efficiency provisions for the following classes of buildings:

- Class 3 (hotels and other commercial accommodation facilities)
- Class 5 buildings (offices)
- Class 6 (retail buildings such as shops, restaurants and cafes)
- Class 7 buildings (carparks and warehouses),
- Class 8 buildings (factories)
- Class 9 buildings (health care, education, sporting facilities and aged care buildings).

Any new work for the above building classes is to comply, as a minimum, with the provisions of NCC2019 Section J from 1 October 2023. These provisions are not retrospective

Energy efficiency provisions for commercial buildings consider the performance of the building fabric, building sealing and the efficiency of building services, including but not limited to air conditioning, ventilation, artificial lighting and power. Performance requirements vary across climate zones and building classes.

Demonstrating Compliance

Compliance with the NCC is achieved by complying with the Governing Requirements of the NCC and the relevant performance requirements.

Section A (Governing Requirements) of the NCC explains the possible methods for demonstrating compliance with the NCC, including the various compliance pathways and the appropriate steps that must be taken for each of these pathways. A combination of solutions may be used to satisfy energy efficiency performance requirements. Examples could include completion of a checklist, ABCB façade and/or lighting calculators, and reports and certificates that may comprise expert judgement as defined in the NCC.

Where the advice of an expert is sought, the building certifier must be satisfied that such evidence of suitability (such as a report or certificate) has been prepared by a person with relevant qualifications and

experience. The level of qualifications and / or experience may differ depending on the type and nature of the proposed building works.

NT registered building practitioners may be engaged to certify the compliance of the design and/or construction of components of building works relating to the energy efficiency requirements. Consideration could be given to the role of NT registered Certifying Engineers - Mechanical or Hydraulic for building services works. Certificates and/or reports issued by these practitioners may constitute evidence of suitability as required by the NCC governing requirements, and may be relied upon by a building certifier under section 40 of the *Building Act 1993* (the Act) where the certificate meets the provisions of this part of the Act.

Residential Buildings

Class 1 and 10 buildings (houses and non-habitable buildings with a conditioned space)

A change to the existing Northern Territory NCC variation for energy efficiency provisions for class 1 and 10 buildings commenced on 1 October 2023. The purpose of this amendment is to improve understanding and use of the current variation through its inclusion in NCC 2022.

In the Northern Territory, NCC 2022 Volume Two NT Part H6 Energy Efficiency and Schedule 6 of the Housing Provisions apply.

There are two options for complying with the NT NCC 2022 energy efficiency performance requirements for Class 1 buildings and Class 10 buildings with a conditioned space:

- 1) a building must achieve an energy rating using house energy rating software (NatHERS), of greater than or equal to 5 stars; or
- 2) complying with NT Parts 13.1 through to 13.6 of the ABCB Housing Provisions,

Class 2 buildings and Class 4 part of a building (apartments and dwellings within a non-residential building)

Section J of BCA 2009 applies to building classes 2 and 4. Compliance with these provisions can be demonstrated when the house energy rating of each sole-occupancy unit is not less than 3 stars and an average across all sole-occupancy units is 3.5 stars.

Common areas of Class 2 buildings are required to comply with provisions of BCA 2009.

Demonstrating compliance

As NatHERS Ratings Software versions continue to evolve, compliance with energy rating provisions in the NT (minimum 5 stars for houses, 3 stars for apartments) can be demonstrated through use of the current available software versions.

Application of provisions prior to adoption of NCC 2022

Section 51 of the *NT Building Act 1993* provides for application of new regulations.

Building Note 112 provides advice on the application of Section 51 of the *NT Building Act 1993* for changes to the NCC from 1 October 2023, including introduction of new energy efficiency provisions for commercial buildings.

Application of provisions to existing buildings

The application of energy efficiency provisions and the process for determining compliance for building alterations and additions should be no different to determining compliance to other aspects of the NCC.

All new work must comply with energy efficiency provisions, including alterations, additions and extensions. Any specific elements altered within a building are to comply with current NCC and energy efficiency requirements.

Elements of an existing building that are not part of a planned building alteration may not require compliance with current NCC provisions, particularly when upgrading such elements are not considered to effect the compliance of the new building works.

In determining compliance for specific scenarios, NCC requirements should be considered in the first instance. Building Advisory Services may be contacted to provide guidance on application of NCC requirements.

Achieving compliance with energy efficiency provisions

Whilst the NT has adopted variations to current NCC requirements, it is important to note that these variations do not prevent the application of more recently published provisions of the NCC if desired.

The Australian Building Codes Board (ABCB) provides comprehensive guidance, including handbooks and various case studies on compliance pathways for NCC energy efficiency provisions.

These are available from the ABCB website at abcb.gov.au

Key resources for the Northern Territory include:

Energy Efficiency Volume One (2019) Handbook – Guidance on understanding and applying energy efficiency provisions for building classes 3 and 5-9.

Evidence of Suitability Handbook – Guidance on the correct application of the evidence of suitability provisions of the NCC

Further information

Contact Building Advisory Services for further information:

- Email bas@nt.gov.au
- Phone 08 8999 8985



Mark Meldrum

Director Building Control

30 September 2024