Australian Capital Territory

Construction Occupations (Licensing) Building Energy Efficiency Assessment Sale and Lease of Residential Premises Code of Practice 2016

Disallowable instrument DI2016–242

made under the

Construction Occupations (Licensing) Act 2004, section 126A (Codes of Practice)

EXPLANATORY STATEMENT

This instrument approves the Construction Occupations (Licensing) Building Energy Efficiency Assessment Sale and Lease of Residential Premises Code of Practice 2016.

The approved code replaces the *Construction Occupations (Licensing) Building Energy Efficiency Assessment Sale and Lease of Residential Premises Code of Practice 2012 (No 1)* (NI2012-228). There are no changes to the content of the code. An explanation of the code and its provisions is below.

Background
On 2 August 2016, the Legislative Assembly passed the Building and Construction Legislation Amendment Bill 2016, which was notified as an Act (the amending Act) on 19 August 2016. http://www.legislation.act.gov.au/b/db_54056/default.asp

Amendments to the *Construction Occupations (Licensing) Act 2004* change the maker and the form of an approved code of practice. The amending Act omits Section 104A, under which the Construction Occupations Registrar approved codes of practice as notifiable instruments, and inserts new section 126A, *Codes of practice*. Under section 126A, the Minister approves codes of practice. An approval is now a disallowable instrument.

The codes made under repealed section 104A are not taken to be codes made under section 126A, as they were not approved by disallowable instrument and subject to Assembly consideration.

Therefore, the amending Act repeals the following codes of practice:

- *Construction Occupations (Licensing) Building Energy Efficiency Assessment Sale and Lease of Residential Premises Code of Practice 2012 (No 1)* (NI2012-228)

- *Construction Occupations (Licensing) Unit Title Landscaping Works Assessment Code of Practice 2010* (NI2010-529)
- *Construction Occupations (Licensing) Unit Title Site Assessment Code of Practice 2010 (No 2)* (NI2010-582)
- *Constructions Occupations (Licensing) Unit Title Unit Fitness Assessment Code of Practice 2010* (NI2010-632).

This instrument makes a new Building Energy Efficiency Assessment Sale and Lease of Residential Premises Code of Practice to replace the repealed code.

Regulatory Impact Analysis

Regulatory impact analysis for this code of practice is not required under the Legislation Act. Licensing of building assessors and the lodgement of energy efficiency ratings (EERs) was introduced by the *Construction Occupations Legislation Amendment Act 2010 (No 2).* Impact analysis was carried out prior to the introduction of the associated Bill.

This code of practice does not introduce new requirements for preparing an EER statement. It makes a new code with the same contents as the code it replaces (Construction Occupations (Licensing) Building Energy Efficiency Assessment Sale and Lease of Residential Premises Code of Practice 2012 (No 1) (NI2012-228)) as a result of legislative changes that change the form of an approval from a notifiable instrument to a disallowable instrument.

The Explanatory Statement for the amending Act notes the intention for the codes made under section 104A to be remade under section 126A.
http://www.legislation.act.gov.au/es/db_54057/default.asp

General information

Part 3 of the *Civil Law (Sale of Residential Property) Act 2003* (the Civil Law Act) provides that an energy efficiency rating (EER) must be declared when premises that may lawfully used for residential purposes are advertised or offered for sale. Some dwellings, such as student accommodation, mobile homes and nursing homes are exempted from these requirements. An EER statement contains information on certain elements that relate to the energy efficiency of the habitable part of the premises and opportunities to improve its energy efficiency. The EER statement must form part of the contract of sale.

Requirements for the sale of residential properties were introduced in the ACT in 1998. EERs provide the market, industry and consumers with a quantifiable measure of the thermal performance of residential premises, and therefore a comparison of relative energy efficiency across buildings of the same type and size. An EER is expressed as a star rating and is based on the theoretical amount of energy required to heat and cool the home to a comfortable temperature. It relates only to the building and relevant external objects that may shade the building and does not consider the effect of occupant behaviour or the appliances used in the building.

Similar requirements for the disclosure of an EER exist under the *Residential Tenancies Act 1997* when leasing or advertising a residential property for lease in cases where an EER has been prepared for the property.

In 2010, regulations relating to the preparation of energy efficiency rating statements transferred from the Civil Law Act to the *Construction Occupations (Licensing) Act 2004* (the Act). This amendment was part of new regulations to introduce licensing for building assessors performing energy efficiency assessments for regulatory purposes. Section 123AD (Energy efficiency rating statement), provides for the preparation of energy efficiency rating statements required under a Territory law. The section requires licensed building assessors to undertake energy efficiency assessments in accordance with relevant codes of practice.

Section 126A of the Act allows the Minister to make codes of practice for a construction occupation, a class of construction occupation or a construction service.

The *Building energy efficiency assessment sale and lease of residential premises code of practice* (the code of practice, the code) prescribes requirements for assessing, reporting and advertising the energy efficiency of residential premises for an energy efficiency rating or energy efficiency rating statement. It includes procedures and methodologies for technical assessment of dwellings, building elements and external features involved in a building assessment service.

The code also provides for energy efficiency assessment and reporting for certain new dwellings, certain substantially altered dwellings and dwellings sold off the plan, and extends the circumstances where an assessment for compliance with building regulation can be used for meeting disclosure requirements in the Civil Law Act.

The code of practice applies to building assessors undertaking an energy efficiency assessment for the purpose of sale or lease of premises. It also provides for deemed energy efficiency rating statements and sets requirements for the form they must take.

The code consolidates existing relevant technical and administrative procedures for energy efficiency assessment of existing premises. It also provides new methods for calculating input values for building elements such as insulation and obstructions.

This document is intended to complement, rather than replace, the more detailed modelling methods and instructions that form part of the software, user manuals and training in the operation of software. It provides an overview of assessment procedures and principles and additional requirements for the collection and verification of data and energy efficiency as it relates to existing premises.

Detailed explanation of clauses

Part 1
Part 1 provides general information about the name of the code, the inclusion of dictionary terms and the offences and other consequences that may arise from contravention of the code.

A number of enforcement and offences relate directly to the building assessor and the preparation and provision of an EER statement. Other mechanisms in the Civil Law Act and *Residential Tenancies Act 1997* relate to people reporting or advertising false or misleading EERs. These provisions may relate to building assessors, real estate agents, vendors and lessees.

Part 2
Part 2 provides information about the object of the code and the application of the code to building assessors licensed under the Act.

It gives meaning for terms in the code, specifically outlining the different types of energy efficiency assessment that may become part of an energy efficiency rating statement provided for in the code. In addition to assessments of existing premises, assessments can be made of new buildings and alterations and additions to a building using methods approved under the ACT building code.

Section 4 outlines that the code provides for energy efficiency assessments and reporting for all residential premises for which an energy efficiency rating statement must be prepared.

Section 5 applies relevant parts of the code of practice to building assessors. Energy efficiency rating statements can only be prepared by a person licensed under the Act to provide a building assessment service for energy efficiency. Assessors of an existing home must hold a Class A licence, which includes assessment with an on site component.

Section 7 outlines that the code may refer to a compliance method that is allowed under the building code, meaning the ACT building code, which incorporates the Building Code of Australia published by the Australian Building Codes Board as amended from time to time and the ACT appendix to that code.

This is important as the building code is a performance based code and does not prescribe a single method for compliance. It is not mandatory to demonstrate compliance with relevant energy efficiency standards by providing an energy efficiency rating. Where a compliance method including an energy efficiency rating is used, only certain software meeting technical criteria may be used.

Section 8 provides the general parameters for an energy efficiency assessment. An energy efficiency assessment for the purposes of this and related regulation is an assessment of the building envelope, including the walls, floors, ceiling, roof, and ventilation through openings such as windows, doors, vents, exhaust fans, and certain types of lighting. The assessment includes materials used in the premises and the amount of space that requires conditioning (heating and/or cooling). The assessment also includes the effect of external shading provided by eaves, awnings, neighbouring properties and other objects such as trees and fences.

The purpose of an assessment of an existing property for sale or lease is to assess the building as constructed and in the condition it is in at the time of assessment. This may include elements such as window coverings that may not be used for meeting compliance with a building standard.

Section 9 gives a meaning for alternative energy efficiency ratings. These ratings differ from standard energy efficiency ratings for existing premises and may be produced using different software, modelling methods, technical information or procedures.

Section 10 defines a code energy efficiency rating as a separate type of energy efficiency rating, being an energy efficiency rating produced to demonstrate compliance with a provision of the building code. The software, protocols, calculations, modelling methods and elements included in an assessment for producing a code energy efficiency rating differ from those for an assessment of an existing dwelling to be sold. The purpose of energy efficiency assessment under the *Building Act 2004* is for determining compliance with minimum building standards.

Part 3

Part 3 outlines the requirements for energy efficiency ratings statements, including deemed statements for certain buildings, when prescribed software may not be used, reporting and advertising of ratings.

Section 11 provides for the types of energy efficiency rating statements allowed for the purposes of disclosure requirements in the Civil Law Act and the *Residential Tenancies Act 1997*. It allows for deemed energy efficiency rating statements.

Section 12 outlines requirements concerning the currency, validity and completeness of EER statements. It also provides for the documentation that must be used as an EER statement. This is necessary to ensure that information provided to prospective purchasers and tenants is consistent, and an accurate basis on which to make a comparison between properties and a decision on a purchase.

It includes a requirement for vendors to provide a statutory declaration for statements more than 6 months old that no building work or other alteration to the building, its elements and external elements that affect the energy efficiency rating have been carried out, or would make the energy efficiency rating misleading.

The Civil Law Act provides that a new energy efficiency rating must be prepared after any building work. However, many alterations to a building and its fabric can be made that do not fall within the definition of building work, including installation of floor coverings, insulation, and shading devices. Changes made external to the building, such as erecting a fence or the construction of a neighbouring premises can have a substantial effect on the energy efficiency of a premises.

The new provisions extend the requirements under the previous guideline made under the Civil Law Act, which required only a declaration of building work as defined under the *Building Act 2004*. The inclusion of other work or alteration of a building or external elements in considering the currency and validity of an energy efficiency rating statement is important as there are many changes outside of regulated building work that can be made that can impact the thermal properties and subsequently the thermal performance of a building. The new provision intends to capture all of the additional changes that could impact on the premises.

The lessee, rather than a building assessor, is obliged to verify the currency or validity of an EER statement to be used. It is expected that where in doubt the lessee would seek independent advice. Examples of changes that may affect a premises' energy efficiency are provided in the code. Section 25 also provides guidance on the elements that could affect the energy efficiency of a building.

Section 13 provides for situations where the allowed software cannot accurately assess a particular building, or part of that building. This section recognises that software has limitations and non-standard building configurations or designs may not be able to assessed using authorised software. Other forms of software, such as that used for building code assessments, may provide a more appropriate assessment in certain circumstances, noting that all software has limitations and some building elements may not be able to be adequately assessed in any of the available assessment or rating tools.

Where the software cannot assess the building, and no provision in the code is prescribed for the situation, a building assessor must notify the construction occupations registrar and comply with a direction to complete the assessment using either a prescribed method, or an alternate form of energy efficiency rating. The construction occupations registrar must provide this direction within 5 working days.

Section 14 outlines the requirements for a deemed EER statement if an alternative energy efficiency rating must be produced under section 12. It is intended that the documentation for an alternative energy efficiency rating would be comparable with a prescribed EER statement, as far as is reasonable. Reporting from alternative software is not standardised and not necessarily adapted for mandatory disclosure purposes. Therefore the construction occupations registrar may require information to be provided in a different form, such as a summary of relevant information. Standard forms for alternative energy efficiency ratings may be developed.

Section 15 provides for deemed energy efficiency rating statements to be used for completed new buildings in certain instances. This is necessary to allow for the use of standard documentation certifying compliance with minimum energy efficiency performance standards and detailing elements of an energy rating for new premises to be used for contracts of sale prior to the first occupation of the premises.

Section 16 outlines provisions for documentation that forms a deemed energy efficiency rating statement for premises that are sold prior to completion of construction. This is necessary to avoid the need for preparation of separate ratings for the sale where compliance with energy efficiency requirements for new buildings can be demonstrated. This clause also allows for standard documentation demonstrating energy efficiency performance to be used for consistency of information.

Section 17 provides for deemed energy efficiency ratings statements for substantially altered premises. Currently the energy efficiency of a dwelling to be sold is calculated using FirstRate, a 'first generation' thermal modelling software tool developed by the Victorian Government under the Nationwide House Energy Rating Scheme. The software provides a level of detail suitable for most of the dwellings in the Territory but is no longer used for assessment of buildings in building regulation.

The ACT building code incorporates the national Building Code of Australia (BCA). The BCA has regulated the adoption of national protocols and standards for the energy efficiency of new dwellings including houses, units and apartments. The ACT also applies energy efficiency standards to alterations and additions to dwellings.

While the BCA provides various methods to assess the energy efficiency of a dwelling, one of the deemed to satisfy options for calculating heating and cooling loads is to provide an energy efficiency rating prepared on accredited "second generation" software. Although assessment of a new building has different parameters to that for a completed dwelling to be sold, the software generations are broadly correlated and use the same rating scale.

Guidelines for energy efficiency rating statements were revised in 2009 to allow energy efficiency documents for new buildings to be used in place of obtaining an additional rating. This code of practice extends the policy further allowing any energy efficiency certificate for substantially altered premises to be used where it represents the current construction and condition of the entire premises. This removes a cost to the premises owner of obtaining a new assessment when the dwelling is to be sold or leased.

Section 18 outlines reporting requirements for energy efficiency ratings. This is important as the EER must be used in all advertising, the EER statement and other associated documents, and is the primary point of comparison between premises.

Ratings in software for sale of premises are based on the theoretical amount of energy to keep the dwelling within a specified temperature range. All software used for regulation in the ACT is based on a single 10 star scale developed under the Nationwide House Energy Rating Scheme (NatHERS). Standard sale of premises software can report up to the 6 star increment of the scale. The scale includes half star (0.5) increments starting at 0. A rating represents that the energy use falls within a certain rating band (star band). This section clarifies that where smaller increments are included by software providers they do not form a regulatory or reportable rating. Smaller increments are generally provided to indicate to the building assessor how far from the next band the efficiency of the dwelling falls. Use of these increments implies a false level of accuracy to the rating and a potentially misleading differentiation between dwellings.

This section also includes reporting requirements for certain new buildings that have not demonstrated compliance with building standards using an energy efficiency rating. The compliance methods in the building code are intended to produce similar levels of performance. The provisions allow a nominal rating no greater than the minimum in place for a premises of the type being assessed to be declared. This nominal rating is not valid for subsequent disclosures after the building is occupied.

Section 19 outlines requirements for advertising of energy efficiency star ratings. The EER may only be reported using the rating calculated in accordance with section 18. No other rating generated by software may be advertised as the EER for the premises.

Part 4

Part 4 provides for the preparation of an EER statement. It provides technical definitions and parameters for assessing building elements and external objects to a premises and methods of inputting information and values that are assigned to the element or object. This is necessary to ensure that EERs are produced on a consistent basis, and that a statement, including the rating, is accurate to the degree that is reasonable and is relevant to the climate in which the premises is located.

Section 21 outlines the types of information a building assessor must collect to undertake an assessment. It emphasises that regardless of whether building plans or other documents exist, an assessor must verify all relevant information by a visual inspection as far as is reasonable. This is important as the assessment is not of a building design, but of a premises after it has been constructed. The responsibility for the accuracy of the information that can be verified lies with the building assessor producing the EER statement.

Subsection (4) outlines limitations on the collection of evidence from a person for whom a conflict of interest exists under section 123AE of the Act. Accepting a statutory declaration from a person with a conflict of interest where the information is not verified independently is a breach of the code.

Section 22 provides for recording evidence in relation to the assessment, particularly notes and other information from a visual inspection. This is important as in many cases available building plans may not represent later alterations to the building or surrounds.

This section also requires building assessors to record details on assumptions and limitations in collecting or verifying information. This is necessary as the energy efficiency rating statement is not an inspection report and does not contain these details. Recording this information is required for auditing and compliance purposes when documents are subsequently submitted to the construction occupations registrar. These records also give both the assessor and premises owner clear information about the inspection and where details were not able to be obtained due to limited access.

Sections 23 and 24 outline that the energy efficiency rating statement must be prepared on permitted software the building assessor is specifically authorised to operate.

Section 25 outlines the elements of a premises and external to that premises that must be assessed. It also provides that the building assessor is to model the premises being sold or leased. If a fixture or fitting relevant to the energy efficiency rating will not be part of the transaction it must be excluded from the assessment.

Section 26 provides for the type of assumptions a building assessors may use in preparing an energy efficiency rating statement. This is to standardise the basis of assessments. While there will be a level of discretion in the assessment to determine the most appropriate value to be assigned to an element, how these should be assessed are described in the code and in software user instructions. Assessors must not assume a level of performance for building, building element or external object above that which can be verified. This is important to ensure that the performance of the building is not inflated and advertised at an efficiency that could not be established by the assessment.

Section 27 provides for standard software setting that must be used for the assessment. The assessment must be undertaken in the correct climate zone and using the entire climate, behavioural settings and algorithms set in the software. An assessor must not change the assumptions on occupant behaviour or climate data and cannot change how the rating is calculated.

This does not mean defaults for an input must be used. For example if the default for window coverings is ‘Holland blinds’ and the window has no covering an assessor must not leave the default value but assess the element as it is in the property.

As ACT legislation can apply in the Jervis Bay Territory, climate zones for that Territory are also provided.

Section 29 and **section 30** provide for the measurement of floor areas and the zoning of areas into conditioned areas, those that will require heating and cooling, and unconditioned areas. The determination of the amount of area to be conditioned is fundamental to the energy efficiency rating.

Sections 31, 32 and 33 provide for the assessment of attached garages, adjacent and adjoining properties.

Section 34 provides for the modelling of obstructions to a window. An obstruction that is sited within the distances outlined in the section must be input in the assessment, as these obstructions will shade the window. The amount of shading is determined by the software based on the dimensions of the obstruction. A diagram is provided to help building assessors determine whether an obstruction should be assessed.

Section 35 outlines the obligation for the assessor to include protected trees in the assessment where they meet the criteria in section 34 and refers to schedule 6 for the calculation of the dimensions to be input to the software. This provides a simple, standard methodology for measuring the obstruction provided by a tree.

Sections 36, 37 and 38 provide for the assessment of ventilation, air infiltration and leakage values. The tables in the referenced schedules confirm values and defaults that must be used in the assessment.

Section 40 provides for the calculation of effective insulation values. The resistance to heat flow, known as thermal resistance and indicated by a resistance or R value can be affected by things such as material being compressed and gaps in the coverage of the insulation. Therefore, the R value of the product as installed or after deterioration with age may be less than the value on the product label or specified on a building plan.

Section 41 outlines the requirements for determining properties of bulk insulation. The section requires the building assessor to make a visual inspection of the property and defines reasonable access to perform an inspection. As insulation is one of the major influences of the energy efficiency of a property, the assessment of insulation is central to the accuracy of the rating. The definition of *reasonable access* is consistent with provisions of the *Building Act 2004* relating to the installation of insulation and with Australian standards for building inspection.

Recognising that in some instances, an inspection is not feasible post-construction due to the design of the premises or obstructions to access points, the section also provides for determining insulation properties where reasonable access to relevant space in a building does not exist.

Section 42 provides for assumptions that can be made where a building plan or other relevant documentation for the building is not available and insulation values could not be reasonably determined by an inspection.

Section 43 details where a correction must be made for a gap or gaps in ceiling insulation. These provisions are consistent with existing requirements under building regulation and standards for installation of insulation.

Section 45 prohibits the inclusion of a value for slab edge insulation in the assessment. While some properties may have slab edge insulation installed, at present there is no reliable method for calculating its effect on the thermal performance of the building. When a method is developed a value may be assigned for an assessment of an existing building.

Section 52 requires an assessment to be undertaken in accordance with the user instructions of the approved software used for the assessment where an instruction for assessing an element is not provided in the code. The software instructions, including help files and manuals, provide detailed information about the assessment of elements and the operation of the software. Adherence to the user instructions means a greater degree of consistency in assessments and that the software is being used as intended and within its parameters.

Section 53 requires that the energy efficiency rating statement, which is a report directly generated by the software using the inputs provided by the building assessor, includes only the information generated by the software. This does not prevent the assessor marking the document in accordance with section 54 or providing a document to the construction occupations registrar with an electronic mark.

Section 54 provides that documents must be marked by the building assessor that has prepared the energy efficiency rating statement. The mark will identify the date of issue for the EER statement and the building assessor's details.

This section also requires a building assessor to provide relevant documents to the person who commissioned the energy efficiency rating.

Part 5

Part 5 provides for the submission of documents to the construction occupations registrar. Documents must be provided in 10 working days from the date of the assessment. Officers authorised under the Act may audit the documents and perform a compliance check on the EER or the EER statement. A building assessor is not required to submit any document he or she obtained from the building file kept by the construction occupations registrar unless additional or amended information has been included on the document.

Schedules

The schedules provide approved forms, technical data collection, assessment and calculation methods for preparing an EER. The schedules should be read in conjunction with the relevant section of the code.

Schedule 1 provides an approved form for a statutory declaration made under section 15 for a nominal energy rating for a completed new building that was approved using a compliance method that does not include and energy efficiency rating.

Schedule 2 provides an approved form for a statutory declaration made under section 16 for a nominal energy rating for an incomplete or proposed building that was approved, or will be approved, using a compliance method that does not include an energy efficiency rating.

Schedule 3 provides the points and associated rating bands for software approved for use for the assessment of existing premises for sale and lease disclosure.

Schedule 4 provides the adjusted heating and cooling loads and rating bands for software approved for use under the building code.

Schedule 5 outlines different zones in the building and whether they must be assessed as conditioned or unconditioned.

Schedule 6 provides a calculation for tree dimensions. This calculation is to be used over any method in the user instructions.

Schedule 7 describes subfloor ventilation types.

Schedule 8 describes roof ventilation types.

Schedule 9 provides for air infiltration and air leakage input values. It outlines the default values to be used if a higher performance cannot be verified by a visual inspection and describes requirements for 'downlight' covers to meet electrical safety standards. The safety of the building is not secondary to its efficiency.

Schedule 10 describes a more detailed method for calculating and measuring resistance values for insulation. The schedule gives guidance to building assessors as to the type of information and evidence of compliance for 'downlight' covers that must be obtained to allow the cover to be recognised in the assessment. This is critical so that potentially unsafe practices are not rewarded in the energy efficiency rating. Clearances assumed for recessed luminaries are consistent with electrical safety standards.

The section also provides a table and method for calculating the reduction in R value to be used where there are gaps in insulation. The calculation is based on the building code tables for additional insulation required for gaps up to 5 per cent of the ceiling area.

Schedule 11 allows for values for insulation to be determined if section 42 applies. The building code provides two compliance methods for residential buildings, one which uses an energy efficiency rating, the other requiring each element of the building to meet certain minimum standards. Due to the mandatory requirement to provide an energy efficiency rating under the Civil Law Act, the majority of buildings in the ACT were approved under the EER pathway.

It is incorrect to assume that each element of a building that has a compliant EER would meet the same requirements as for the other compliance method. Therefore, the values in the table have been developed using the prevalent construction practice at the time.

Schedule 12 provides pre-calculated effective resistance values for ceiling insulation.

Schedule 13 describes types of window coverings and how they are to be assessed.

Schedule 14 provides calculation or eaves values for three scenarios. These assessment methods override some parts of the user instructions and clarify the requirements for shading devices that are not horizontal.

Schedule 15 provides approved forms of the mark building assessors must make on relevant documents.