

Energy Efficiency (Cost of Living) Improvement (Eligible Activities) Code of Practice 2022

Notifiable instrument NI2022–587

made under the

Energy Efficiency (Cost of Living) Improvement Act 2012, s 25 (Codes of practice)

1 Name of instrument

This instrument is the *Energy Efficiency (Cost of Living) Improvement (Eligible Activities) Code of Practice 2022*.

2 Commencement

This instrument is taken to have commenced on 1 January 2021.

3 Approved code of practice

I approve the Eligible Activities Code of Practice set out at schedule 1.

Note 1 Australian Standards referenced in the code of practice are available for purchase at www.standards.org.au and are available for inspection by members of the public at the National Library of Australia.

Note 2 A copy of the National Construction Code, which incorporates the Building Code of Australia and the Plumbing Code of Australia, and which is referenced in the code of practice is freely available for inspection at www.abcb.gov.au.

4 Revocation

This instrument revokes the *Energy Efficiency (Cost of Living) Improvement (Eligible Activities) Code of Practice 2020 (No 2)* (NI2020-802).

Fiona Wright
Administrator
16 November 2022

Schedule 1 Approved code of practice

(see s 3)



Australian Capital Territory

Eligible Activities Code of Practice 2022

made under the

Energy Efficiency (Cost of Living) Improvement Act 2012

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SECTION A: BACKGROUND DETAILS

1. Preliminary

1.1. Name of code

This code is the *Eligible Activities Code of Practice*.

1.2. Dictionary

The dictionary at the end of this code is part of this code.

Note 1 The dictionary at the end of this code defines certain terms used in this code and may include references (**signpost definitions**) to other terms defined elsewhere in this code.

Note 2 A definition in the dictionary (including a signpost definition) applies to the entire code unless the definition, or another provision of the code, provides otherwise or the contrary intention otherwise appears (see Legislation Act, s 155 and s 156 (1)).

Note 3 See the Legislation Act, s 127 (1), (4) and (5) for the legal status of notes.

1.3. Offences and other consequences of contravening this code

The *Energy Efficiency (Cost of Living) Improvement Act 2012* provides offence and other enforcement mechanisms that can result from a contravention of this code.

Offences, other enforcement mechanisms and criminal and civil penalties may apply under other relevant legislation to the undertaking of eligible activities, such as for fair trading or competition and consumer law, contractual matters, environment protection, work health and safety or the carrying out of regulated work and can result from a contravention of this code.

Note 1 The Criminal Code, ch 2 applies to all offences against the Act (see Code, pt 2.1). The chapter sets out the general principles of criminal responsibility (including burdens of proof and general defences), and defines terms used for offences to which the code applies (e.g. conduct, intention, recklessness and strict liability).

Note 2 A reference to an Act includes a reference to the statutory instruments made or in force under the Act, including regulations (see Legislation Act, s 104).

Note 3 See the dictionary (section C) for the definition of **relevant legislation**.

2. Important concepts

2.1. Object of code

The object of this code is to prescribe minimum requirements for retailers undertaking eligible activities to comply with an energy savings obligation under the *Energy Efficiency (Cost of Living) Improvement Act 2012 (the Act)*. Obligations may also apply to authorised contractors, authorised sellers and authorised installers, or other people engaged by the retailer, to arrange or undertake certain prescribed activity requirements in accordance with this code. A retailer is responsible for the compliance of eligible activities undertaken by a person contracted, employed or otherwise engaged by the retailer (a retailer's **representative**).

Section 14 of the Act provides that a tier 1 NERL retailer must undertake eligible activities complying with a relevant approved code of practice or acquire approved energy savings factors complying with a relevant approved code of practice to achieve its energy savings and priority household obligations. A tier 2 NERL retailer must undertake eligible activities complying with a relevant approved code of practice, acquire approved energy savings factors complying with a relevant approved code of practice or pay an energy savings contribution for all or part of its energy savings obligation.

Eligible activities are determined by the Minister under section 10 of the Act. A determination must include the minimum specifications for the performance of the activity, amongst other things. The administrator may approve a code of practice (an **approved code of practice**) that applies to an eligible activity. An eligible activity must be undertaken in accordance with relevant approved codes of practice.

In relation to undertaking eligible activities, this code provides for the following minimum requirements—

- (a) consumer protection;
- (b) quality requirements;
- (c) health and safety requirements; and
- (d) environmental requirements.

This code also provides specific requirements for certain eligible activities.

Note Enquiries about the obligations of retailers or other parties under this code should be directed to the administrator at EPD-EEIS@act.gov.au.

2.2. Context of this code

This code is one of a number of instruments that should be read in conjunction, including:

- the Act;
- the *Energy Efficiency (Cost of Living) Improvement (Eligible Activities) Determination 2022 (eligible activities determination)* or subsequent instrument made under section 10 of the Act; and
- the *Energy Efficiency (Cost of Living) Improvement (Record Keeping and Reporting) Code of Practice 2020 (no 2) (record keeping and reporting code of practice)* or subsequent instrument made under section 25 of the Act.

Note All applicable instruments can be found at <http://www.legislation.act.gov.au/a/2012-17/default.asp>. This is a link to the main page for the Act on the ACT Legislation Register. Links to subordinate regulations and instruments for the Act can be found on this page.

This code establishes standard consumer protection, competency and general obligations for retailers and their representatives. This code encompasses a range of eligible activities for the residential and business sector.

The activity specific requirements in this code extend the existing requirements for the relevant activity and do not limit or replace any other applicable requirements.

Note All eligible activities have an activity definition, minimum activity performance specifications, installed product requirements, a time the activity is taken to be completed and a method for calculating the energy savings factor for the activity prescribed in the Eligible Activities Determination. The requirements in this code are in addition to those provisions.

The administrator may provide guidance and explanatory material for retailers and their representatives on complying with the Act and about eligible activities on the website for the Energy Efficiency Improvement Scheme at www.climatechoices.act.gov.au.

2.3. Meeting all legal requirements

The description and specifications for eligible activities in this document are minimum requirements for the purpose of complying with the Act. They are not intended to be exhaustive. In particular, in addition to the specifications set out in this document, all activities must be undertaken in accordance with all laws, regulations, codes of practice and other requirements applicable to that activity.

Relevant legislation includes, but is not limited to—

- *Building Act 2004*;
- *Construction Occupations (Licensing) Act 2004*;
- *Dangerous Substances Act 2004*;
- *Electricity Safety Act 1971*;
- *Environment Protection Act 1997*;
- *Fair Trading Act (Australian Consumer Law) Act 1992*;
- *Gas Safety Act 2000*;
- *Water and Sewerage Act 2000*;
- *Work Health and Safety Act 2011*;
- *Ozone Protection and Synthetic Greenhouse Gas Management Act 1989* (Commonwealth); and
- *Competition and Consumer Act 2010* (Commonwealth).

Note A reference to an Act includes a reference to the statutory instruments made or in force from time to time under the Act, including regulations (see Legislation Act, s 104).

To remove any doubt, eligible activities undertaken for the purpose of complying with an energy savings obligation are not exempt from the standard regulatory requirements for those activities, even if those requirements are not specifically stated or referred to in this code. Other legislative requirements may include occupational licensing, technical, safety or environmental standards for the installation or disposal of waste products, statutory approvals, statutory certifications, or work health and safety requirements.

2.3.1. Examples

Examples of other legislative requirements that may apply to an activity—

- (a) People undertaking construction and other relevant types of work are required to undertake asbestos awareness training under the *Work Health and Safety Act 2011*. In undertaking an activity that involves replacing a window and frame at a residential premises, if a person notices asbestos sheeting that must be removed, then approval, certification and licensing requirements for asbestos assessment and removals must be complied with in assessing and removing the asbestos. At the same premises, if the lessee also requests a replacement of a window more than 2m wide, this triggers the relevant sections of the *Building Act 2004* for approval, licensing and certification of the work.

- (b) An authorised installer is attending a residential premises to carry out a water heater replacement on Saturday, which has previously been arranged with a consumer. The installer considers door knocking neighbouring premises after she has finished the work to see if other consumers are interested in eligible activities. However, by the time she has finished the work, it is 5.30pm. Door-to-door traders cannot call on consumers after 5pm on Saturdays under ACT fair trading legislation.

Note An example is part of the code, is not exhaustive and may extend, but does not limit, the meaning of the provision to which it relates (see Legislation Act, s 126 and s 132).

2.4. Inconsistencies with other requirements

If there is an inconsistency between the minimum prescribed activity requirements and a corresponding regulatory requirement in other relevant legislation applying to the activity and the regulatory requirement is greater than the activity requirement under the Act or this code, the regulatory requirement takes precedence to the extent of the inconsistency.

If there is an inconsistency between the minimum prescribed activity requirements and a corresponding regulatory requirement in other relevant legislation applying to the activity and the activity requirement under the Act or in this code is greater than the regulatory requirement, the activity requirement under the Act or in this code takes precedence to the extent of the inconsistency.

Note This means that the activity must be undertaken to the highest legislated requirement for the activity as a minimum.

2.5. Application to retailers

In this code a reference to a **retailer** means a NERL retailer as defined in the Act, in circumstances where it is undertaking eligible activities for the purposes of complying with an energy savings obligation.

2.6. Application to authorised contractors

In this code a reference to an **authorised contractor** is a reference to an entity that is directly contracted by a retailer to provide or arrange the undertaking of eligible activities, other than an employee of a retailer, in circumstances where it is arranging or undertaking eligible activities on behalf of a retailer.

Note An authorised contractor may be an individual (sole trader), company or other business but does not include an employee of the retailer.

2.7. Application to authorised installers

In this code a reference to an **authorised installer** is a reference to an individual, whether an employee of, or under contract to, a retailer or an authorised contractor, in circumstances where he or she is undertaking an eligible activity on behalf of a retailer.

Note An authorised installer can only be a natural person. An individual may be both an authorised contractor and an authorised installer.

2.8. Application to authorised sellers

In this code a reference to an **authorised seller** is a reference to a business entity that under contract or by other arrangement with a retailer or an authorised contractor, undertakes an eligible activity that specifically refers to the purchase of a certain product, but does not require the installation of the product, on behalf of that retailer, in circumstances where it is arranging or undertaking that activity.

Note 1 An authorised seller may be an individual (sole trader), company or other business but does not include an employee of the retailer or business.

Note 2 An authorised seller may also be an authorised contractor.

Note 3 Activities that specifically refer to the purchase of a product are Activity 5.2 – Purchase of high efficiency refrigerator or freezer, Activity 5.3 – Purchase of high efficiency electric clothes dryer, and Activity 5.5 – Purchase of a high efficiency television. These activities do not require an authorised installer to install the product, or for the product to be installed for the activity to be considered complete.

2.9. Meaning of certain terms – correlation with Act

A term used in this code has the same meaning as the term has in the Act unless this code provides a different meaning for the term.

2.10. Meaning of Energy Efficiency Improvement Scheme and the Scheme

In this code a reference to the **Energy Efficiency Improvement Scheme** (EEIS) or **the Scheme** is a reference to the name under which the obligations in the Act and the administrative and operational arrangements for the Act are promoted collectively by the ACT Government.

2.11. Meaning of eligible activities determination

In this code a reference to the eligible activities determination is a reference to the *Energy Efficiency (Cost of Living) Improvement (Eligible Activities) Determination* made by the Minister under section 10 of the Act, as in force from time to time.

Note The determination in force at the time this code was approved was the Energy Efficiency (Cost of Living) Improvement (Eligible Activities) Determination 2022. The determination may be revoked and replaced with another determination or determinations that provide for eligible activities under the Act. This code should be read in conjunction with the latest determination or determinations.

2.12. Meaning of eligible activity and activity

In this code a reference to an **eligible activity** or an **activity** is a reference to an activity that is determined by the Minister to be an eligible activity under section 10 of the Act.

2.13. Meaning of record keeping and reporting code

A reference to the record keeping and reporting code of practice is a reference to the *Energy Efficiency (Cost of Living) Improvement (Record Keeping and Reporting) Code of Practice* made by the Administrator under section 25 of the Act, as in force from time to time.

Note The ‘activity specific’ record keeping and reporting requirements for each activity are listed in section B.

2.14. Meaning of consumer

In this code a reference to a **consumer** is a reference to either—

- (a) for eligible activities that do not require the installation of a product by an authorised installer, an individual who is a resident of the ACT that purchases the compliant product;
- (b) for eligible activities that require the installation of a product by an authorised installer at a residential premises, an individual who is—
 - i. a party to a residential tenancy agreement for the premises;
 - ii. a lessee of the residential premises; or
 - iii. an occupier of the residential premises at least 18 years of age; or
- (c) for eligible activities that require the installation of a product by an authorised installer at a business premises, an individual who is—
 - i. an appropriate person representing a party to a commercial lease agreement for the business premises;

- ii. a lessee of the business premises; or
- iii. an agent of the lessee or a party to a commercial lease agreement for the business premises.

Note 1 A consumer is not limited to the person that holds the electricity or gas account for the premises or the lessee (owner). The person named on the individual activity record will generally be determined by which person is involved in contracting for the eligible activity or is authorised to sign that the eligible activity has been undertaken. For example, if a tenant engages an authorised installer to decommission a refrigerator, install a standby power controller or has permission to arrange for or sign for the installation of a water heater, the tenant may be recognised as the consumer. If the lessee (owner) contracts the installation of a water heater in a tenanted property, the lessee may be the consumer.

Note 2 A premises owner may come to an arrangement with a tenant for the undertaking of eligible activities. An authorised installer is not required to view or witness the authorisation provided by a lessee to a tenant.

Note 3 For the definition of an appropriate person see the dictionary at section C.

Note 4 The manager of a community organisation's business premises would be an appropriate person recognised as a consumer that could engage authorised installers for a range of activities. The commercial lease agreement will determine the range of activities that this consumer can arrange. Permanent changes to fixtures and fittings may require the lessee or their agent to be the consumer engaging authorised installers.

Note 5 A commercial lease agreement is a lease for a commercial or business premises as per the Leases (Commercial and Retail) Act 2001.

2.14.1. Examples

Examples of consumers—

- (a) A tenant of a premises in which eligible activities are undertaken.
- (b) A lessee (owner) of a premises in which eligible activities are undertaken.
- (c) A lessee (owner) of a premises being constructed or renovated.
- (d) A resident of the ACT who purchases a high efficiency television for use in a residential premises.
- (e) A commercial property agent commissioning building services upgrades on behalf of a lessee (owner.)

Note An example is part of the code, is not exhaustive and may extend, but does not limit, the meaning of the provision to which it relates (see Legislation Act, s 126 and s 132).

2.15. Meaning of lessee

In this code a reference to a **lessee** is a reference to an entity who is a proprietor of the crown lease for the relevant parcel of land on which a premises is located.

Note The ACT operates a leasehold system of land tenure. A lessee is an entity who holds the lease for the land. The term lessee does not refer to a tenant, renter or occupier of a premises under a tenancy or other occupancy agreement.

2.16. Meaning of activity record form

In this code an **activity record form** means a form containing one or more individual activity records.

Note 1 See section 5 of the record keeping and reporting code for further information about general aspects of activity record keeping and reporting.

Note 2 The 'activity specific' record keeping and reporting requirements for each eligible activity are listed in section B.

2.17. Meaning of compliance method

In this code a **compliance method** means a method or practice in this code or other relevant legislation that is allowed to demonstrate compliance with a performance requirement or standard and includes, but is not limited to, verification methods, deemed to satisfy provisions, acceptable construction practices and the like.

2.18. Code does not limit other obligations

This code does not limit the operation of other legislation applicable to providing goods and services that are included in undertaking eligible activities, or modify the obligations of a retailer, under any other relevant law.

3. General obligations

3.1. Application of this section

This section applies to the general requirements for undertaking eligible activities for the purposes of complying with an energy savings obligation under the Act.

3.2. Nomination of activity compliance contact

Within one month of the commencement of this code, or of an entity becoming a NERL retailer if it is not a NERL retailer at the commencement of this code, a retailer must (see note)—

- (a) nominate an employee of its organisation who is an individual as its contact for compliance matters relating to undertaking eligible activities (the **activity compliance contact**);
- (b) provide to the administrator the activity compliance contact's—
 - i. first and last name;
 - ii. position within the organisation;
 - iii. direct business email address; and
 - iv. direct business telephone number.

Note This does not apply if the NERL retailer has already nominated an activity compliance contact.

An activity compliance contact must be an employee of the retailer with sufficient authorisation for managing compliance matters that relate to undertaking eligible activities and this code.

A retailer must notify the administrator in writing of a change of the activity compliance contact or of the activity compliance contact's details within five working days.

Note An activity compliance contact may be a person that is nominated as a contact for other purposes such as a primary reporting contact nominated under the record keeping and reporting code.

3.3. Availability of Scheme information

A retailer must maintain adequate awareness of the general requirements of the Act and the Scheme in its customer contact centres to respond to consumer requests for general information.

As far as is reasonable, information provided to customer contact centre staff by the retailer on the Act and the Scheme must be kept current.

3.4. Management of complaints

A retailer must provide consumers with access to a complaint handling and dispute resolution process established in accordance with *Australian Standard ISO 10002-2006* for any complaints in relation to eligible activities or this code.

Retailers must maintain sufficient record keeping arrangements for complaints in relation to the Act or this code that enable the retailer to respond to any information or reporting requirement in the record keeping and reporting code of practice.

3.5. Privacy of consumer information

All information obtained by a retailer while arranging and undertaking eligible activities must be used, collected and stored in accordance with the Information Privacy Principles (IPPs) set out in the *Privacy Act 1988* (Commonwealth) as if the IPPs were provisions of this code and the retailer was a collector and/or record-keeper of the Personal Information as defined in the Act.

3.6. General conduct standards

3.6.1. Residential or business premises

A person who arranges or undertakes an eligible activity in a residential premises or a business premises on behalf of a retailer must comply with the minimum standards of conduct in this section.

A person arranging or undertaking eligible activities—

- (a) must comply with all applicable laws of the Territory or other applicable jurisdictions;
- (b) for unsolicited contact, immediately identify themselves and advise the consumer the reason for contacting the consumer;
- (c) if attending a premises, show the consumer their identification card issued in accordance with section 3.9 of this code;
- (d) must not engage in misleading, deceptive or unconscionable conduct, whether by act or omission;
- (e) must not exert undue pressure on a consumer or harass or coerce a consumer;
- (f) must not make unsolicited contact with a consumer by calling a telephone or fax number listed on the 'Do Not Call Register';
- (g) must not make unsolicited contact with a consumer in a premises that has a 'Do Not Knock' or similar sign;
- (h) must not hold themselves out to be a representative of the ACT Government;
- (i) must provide information that is truthful and in plain language; and
- (j) must leave a premises immediately when asked by an occupier of the premises.

3.6.2. Residential premises

For an eligible activity undertaken in a residential premises, the activity must only be carried out if one of the following people are present at the premises and aware the activity is being undertaken—

- (a) a person at least 18 years of age; or
- (b) a person that is a lessee or party to a tenancy agreement for the premises.

Note An installer must not undertake an eligible activity in a residential premises if an adult is not present, unless one of the children is a party to the tenancy agreement or a lessee and can give consent to the activity being undertaken.

3.7. Management of conduct

3.7.1. Retailers

A retailer must—

- (a) develop, maintain and follow a system for managing misconduct, dishonesty, fraud and non-compliance with the code of an authorised contractor, authorised seller or authorised installer;
- (b) have a retailer's representative notify the retailer in writing if it is aware of any investigation by a relevant authority relating to misconduct, fraud or any other matter in relation to the arranging or undertaking of an eligible activity it has carried out;

- (c) notify the administrator in writing if it becomes aware of any investigation by a relevant authority relating to misconduct, fraud or any other matter in relation to the arranging or undertaking of an eligible activity on its behalf; and
- (d) give the notification under this section to the relevant person within one working day of the person becoming aware of a notifiable circumstance.

3.7.2. Relevant authority including examples

In this section, **relevant authority** means a government agency, officer holder or other body with a statutory authorisation to investigate or enforce a legislative requirement applicable to arranging or undertaking an eligible activity, including a person exercising a relevant legislated function under delegation or appointment by a Minister or statutory office holder.

Examples of relevant authorities—

- (a) the Construction Occupations Registrar
- (b) the Work Safe Commissioner
- (c) the Commissioner for Fair Trading
- (d) the Chief Planning Executive
- (e) the Environment Protection Authority.

Note 1 An example is part of the code, is not exhaustive and may extend, but does not limit, the meaning of the provision in which it appears (see Legislation Act, s 126 and s 132).

Note 2 A person may be appointed to carry out inspections, investigations and other compliance and enforcement functions under relevant legislation. These people are included in the definition of **relevant authority**.

3.8. Fitness and propriety

A retailer must take all reasonable steps to ensure that a person who attends a residential premises or a business premises to arrange or undertake an eligible activity on behalf of that retailer is a fit and proper person to attend or undertake the activity at that premises.

In assessing the fitness and propriety of a person a retailer must consider—

- (a) whether the person has been convicted of a criminal offence that involves fraud, dishonesty, violence or any other relevant matter;
- (b) if a person has committed an offence involving fraud, dishonesty or violence, the seriousness of the offence, the relevant penalties for the offence;
- (c) the nature of the work the person will be undertaking, including whether the work will be internal or external to the premises;
- (d) whether the person will be accompanied by other representatives of the retailer when attending a premises; and
- (e) the systems and processes the retailer has in place for management of conduct of its representatives.

The administrator may request evidence of an assessment of fitness and propriety under section 10 of the record keeping and reporting code.

3.9. Identification of authorised installers

A person who attends a residential premises or business premises to arrange or undertake an eligible activity on behalf of a retailer must have an identification card showing—

- (a) the person's full name;
- (b) a photograph of the person;

- (c) the identifier of the person given to him or her under sections 3.7, 3.8 and 3.9 of the recordkeeping and reporting code;
- (d) the full name of the retailer the person is representing;
- (e) the full name of the authorised contractor the person is representing if not employed directly by the retailer; and
- (f) a contact address and telephone number for the retailer the person is representing.

An identification card must be clearly legible and developed in consideration of *Vision Australia's Public Policy on Access to Published Information*, particularly with respect to font choice, text layout and colour choice.

Note *Vision Australia's Public Policy on Access to Published Information can be found at <http://www.visionaustralia.org/about-us/public-policy>.*

An identification card may also include the retailer's logos and other branding if it does not obscure the required information on the identification card.

An identification card must not include ACT Government logos or other branding, or information that states or implies that installers are contracted to or otherwise employed by the ACT Government.

3.10. People undertaking activities

An eligible activity that requires the installation of a product must only be carried out by an authorised installer.

Note 1 *An authorised installer can only be a natural person. An individual may be both an authorised contractor and an authorised installer.*

Note 2 *An eligible activity may require more than one authorised installer to complete the activity. For example, decommissioning a central electric space heater and installing a high efficiency ducted gas heater will require a licensed electrician to undertake the electrical wiring work and a licensed gas fitter complete the gas fitting work. If an installer does not hold both licences, more than one installer will be required.*

If an eligible activity does not require the installation of a product by an authorised installer, the activity must be carried out only by an authorised seller.

A person who is not a representative of a retailer must not accompany an authorised contractor or authorised installer into a residential or business premises when an eligible activity is being arranged or carried out, unless otherwise authorised by the relevant retailer or the administrator.

Note *A person accompanying the authorised installer must comply with any applicable work health and safety obligations and general conduct requirements.*

3.11. Determining priority households

3.11.1. Evidence

To determine if a household is a priority household, the authorised installer must either—

- (a) view—
 - i. a form of identification for the person, which shows the person's residential address as the address of the premises in which the eligible activity is undertaken; and
 - ii. the person's card relating to the class of priority as defined in the Act;
- (b) confirm with the retailer or the person that the person—
 - i. receives a government energy concession;
 - ii. is accessing an approved energy retailer financial hardship program; or

- iii. has a referral to a NERL retailer by a referring organisation for access to eligible activities carried out by the retailer; or

(c) confirm with the property manager that the priority dwelling is tenanted.

Note 1 To be eligible for an ACT Government Energy Concession, a person must have a Centrelink Health Care Card, Centrelink or Department of Veteran Affairs Pensioner Concession Card or a Department of Veteran Affairs Gold Card. These cards also relate to eligible classes of priority under the Act. An energy concession may be confirmed by the retailer from its own records where privacy laws are not being breached or a relevant card can be used to determine if a premises is a priority household.

Note 2 Only one class of priority for one person living at the premises has to be identified for the household to be a priority household.

Note 3 A referral under (b)iii could be an email to the tier 1 electricity retailer stating "I (name, title and organisation) verify that (person's name) is experiencing financial hardship and might benefit from exploring opportunities to improve the energy efficiency of their home through the Energy Efficiency Improvement Scheme".

3.11.2. Person eligible for priority household status is not consumer

If the consumer who signs the activity record form for an eligible activity is not the person identified as the person who determines whether the premises is a priority household, an authorised installer—

- (a) does not need to confirm the details of the class of priority with the consumer; and
- (b) may confirm with the consumer that the person lives at the premises.

Note The person that is eligible for priority household status need not be the consumer that is the signatory to the form. The installer does not need to show or verify the information on the class of priority with the consumer if the person holding the concession does not agree to this, but the consumer may confirm that the person is living at the premises.

3.12. Tenanted premises

3.12.1. Inform the consumer

If an eligible activity involving an addition or alteration to, or installation of fixtures or fittings in, a premises for which the consumer confirms a tenancy agreement exists, the person that arranges the activity must inform the consumer that—

- (a) undertaking eligible activities may affect the rights and obligations of the tenant and the lessor, particularly in relation to gaining consent to add fixtures or fittings to the premises, or alter the premises, and in gaining consent to entry to the premises; and
- (b) lessors and tenants of residential premises and commercial premises must comply with their tenancy agreement and other legal obligations under the *Residential Tenancies Act 1997* or the *Leases (Commercial and Retail) Act 2001*, respectively.

3.12.2. Standard statement

An installer undertaking an eligible activity in a residential premises or business premises for which the consumer confirms a tenancy agreement exists must alert the consumer to the information relating to rights and obligations in the standard statement on the activity record form.

Note 1 Under section 41 of the record keeping and recording code the occupancy status for a residential premises or business premises must be identified as part of the activity record. The occupancy status is one of public housing, community housing, private rental, owner occupied, commercial premises or other.

Note 2 Undertaking eligible activities on rented premises may affect the rights and obligations of the tenant and the lessee. For example, the Residential Tenancies Act 1997 requires tenants to obtain the lessor's consent to install fixtures or fittings in rented premises and written consent to any alterations and additions to the premises. If activities are not approved, the tenant must make good any damage to the premises on removal of any fixtures and fittings. That Act also requires that lessors and their agents must not enter the premises except as provided by the law, the relevant tenancy agreement, the Residential Tenancies Act 1997 or an order of the tribunal.

Note 3 Changing lamps and installing plug-in appliances such as standby power controllers would generally not require consent from the lessor.

3.12.3. Consent

An authorised installer is not required to view or witness the consent provided by a lessor to a tenant, or a tenant to a lessor.

Note A lessee may come to an arrangement with a tenant for the undertaking of eligible activities in a premises he or she owns. An authorised installer is not required to view or witness the authorisation provided by a lessee to a tenant. However, if a lessor has arranged an activity and the tenant does not give consent for the installer to enter the premises, the installer must leave the premises immediately if requested, in accordance with section 3.6(j).

3.13. Activities in common areas – unit titles

This section applies if a consumer requests an eligible activity to be undertaken in a part of a premises or property that a representative considers may be common property.

Note Common property is generally those parts of a building and land that are not units or unit subsidiaries such as balconies, carports, storerooms, etc. (see section 13 of the Unit Titles Act 2001).

3.13.1. Inform the consumer

The representative must inform the consumer that undertaking the activity may require authorisation from the owners' corporation, or building owner for an addition or alteration to, or installation of fixtures or fittings in, a premises for which the consumer confirms a tenancy agreement exists. The person that arranges the activity must inform the consumer that—

- (a) undertaking eligible activities may affect the rights and obligations of the consumer and the owners' corporation, particularly in relation to gaining an authorisation to use common property; and
- (b) consumers must comply with their legal obligations under the *Unit Titles Act 2001* and *Unit Titles (Management) Act 2011*.

Note 1 Undertaking eligible activities on rented premises may affect the rights and obligations of the consumer and the owners' corporation. For example, the Residential Tenancies Act 1997 requires tenants of residential premises to obtain the lessor's consent to install fixtures or fittings in rented premises and written consent to any alterations and additions to the premises. If activities are not approved, the tenant must make good any damage to the premises on removal of any fixtures and fittings. That Act also requires that lessors and their agents must not enter the premises except as provided by the law, the relevant tenancy agreement, the Residential Tenancies Act 1997, or an order of the tribunal.

Note 2 Changing lamps and installing plug-in appliances such as standby power controllers would generally not require consent from the lessor.

3.13.2. Consent

An authorised installer—

- (a) may request to view a copy of the authorisation provided by the owners' corporation in relation to the use of common property; and
- (b) is not required to view the authorisation provided by the owners' corporation to the unit owner.

Note An owners' corporation may grant an authorisation for a unit owner to the enjoyment or use of common property. However, the installer may request to view the authorisation if she or he wishes to confirm the eligible activity may take place and any restrictions on the use of the property.

3.14. Decommissioning and management of waste

If an activity involves the decommissioning of a product, a retailer and its representatives must adopt environmentally responsible and verifiable decommissioning practices.

In addition—

- (a) all decommissioned products and waste products must be disposed of in a way that complies with the *Litter Act 2004* and the *Waste Management and Resource Recovery Act 2016*
- (b) any regulated waste under the *Environment Protection Act 1997* resulting from the installation or removal of an existing product must be managed and disposed of in accordance with that Act, including obtaining any required authorisations;
- (c) any substances to which the *Dangerous Substances Act 2004* applies, must be decommissioned and managed in accordance with that Act;
- (d) refrigerants must be sold, stored, and disposed of in accordance with any relevant law, including but not limited to the *Ozone Protection and Synthetic Greenhouse Gas Management Act 1989* (Commonwealth) and *The Australian Refrigerant Handling Code of Practice 2007*;
- (e) if the *Building Act 2004* applies to the eligible activity, a prescribed activity requirement or associated work, the requirements in the ACT building code for the control of litter on building sites and waste management must be complied with, if relevant;
- (f) notwithstanding any legislated requirements for specific product components, if a water heater, space heating system, heating ductwork, refrigerator, freezer, exhaust fan, taps, shower fixture outlet or glazing is able to be removed from the premises, a retailer or its representative must take the product to a facility with the capacity to safely recycle the components of the product that can reasonably be recycled;
- (g) decommissioned lamps must be recycled at a facility with the capacity to safely recover and reuse mercury, glass, phosphor and aluminium;
- (h) all reasonable endeavours should be used to recycle any other waste generated in the course of undertaking an activity, including any packaging from the installed product; and
- (i) if recycling of a product component or other waste is not practicable, those product components or waste must be disposed of in a manner that complies with environmentally responsible and verifiable decommissioning practices.

3.15. Notification of health, safety and environmental incidents

If a public health, safety or environmental incident that must be reported or mitigated under a relevant law occurs during, or as a result of undertaking, an eligible activity, it must be reported to the relevant authority or mitigated in accordance with that law.

Examples of incidents that must be reported or mitigated—

- (a) A serious gas accident must be reported under Part 5 of the *Gas Safety Act 2000*.
- (b) A duty to notify of actual or threatened environmental harm under section 23 of the *Environment Protection Act 1997*.

Note An example is part of the code, is not exhaustive and may extend, but does not limit, the meaning of the provision to which it relates (see *Legislation Act*, s 126 and s 132).

4. Competency of representatives

4.1. Application of this section

This section provides for the minimum competency requirements for people arranging and undertaking eligible activities on behalf of a retailer for the purpose of complying with an energy savings obligation under the Act.

4.2. Engaging representatives

A retailer must—

- (a) engage suitably competent people to arrange and carry out eligible activities;
- (b) ensure that its representatives hold adequate insurance for the work they will be undertaking, including but not limited to any insurance required to be effected by it by law, public liability insurance and professional indemnity insurance;
- (c) ensure that people undertaking eligible activities on its behalf have completed all necessary training, including but not limited to installation training and work health and safety training, to provide those eligible activities in accordance with all relevant requirements for the activity; and
- (d) engage a sufficient number of competent people to undertake the number of eligible activities it arranges and is planning to undertake.

Note If a retailer expects to undertake a certain number of eligible activities, it must engage enough installers to carry out the activities in the time required while complying with all relevant requirements. If a retailer fails to meet an energy savings obligation, or comply with all relevant requirements because it has failed to engage sufficient competent people to carry out eligible activities, the administrator may take any action permitted by the Act in relation to that non-compliance.

4.3. General competencies

A representative undertaking an eligible activity on a retailer's behalf must—

- (a) be familiar with the objects of the Act and the general requirements of the Scheme;
- (b) understand the activity definition, the minimum performance specifications, all relevant standards and prescribed activity requirements for the activity;
- (c) have adequate and relevant technical knowledge of the product being installed, including any restrictions on its installation and the ability to instruct consumers on correct and safe use of the products;
- (d) provide energy efficiency information to consumers in a form supplied by the administrator;
- (e) be able to determine when a premises is not eligible for the activity;
- (f) understand that the nature of the energy savings claimed for the activity is over the expected lifetime of the product;

Note The energy savings claimed for the activity is the energy savings expected over the assumed lifetime of the product. Expected product life and energy savings will differ from product to product but the calculation of energy savings for each product is based on the same principle.

- (g) be familiar with the contents of the standard statement in the activity record form;
- (h) understand the function and importance of the activity record form and activity certification and the record keeping obligations for the activity;
- (i) understand the possible legal consequences to the representative and the retailer of inaccurate or fraudulent claims in relation to an eligible activity; and

- (j) be able to refer consumers to the relevant retailer's information or customer contact service relating to the Scheme, and complaint or dispute resolution processes in relation to the eligible activity.

4.4. Training requirements

4.4.1. Contractor or installer

Before an authorised contractor or authorised installer arranges or undertakes an eligible activity, they must successfully complete—

- (a) any induction training for the Scheme and relevant activity required by the administrator under section 4.5;
- (b) any safety training required by this code or the *Work Health and Safety Act 2011*;
- (c) any specific training and licensing required to undertake the relevant activity, such as—
 - i. if the activity requires construction work, a General Construction Induction Card;
 - ii. if the activity requires construction work, 10675NAT “Asbestos awareness” or an equivalent course;
 - iii. if the activity requires working at heights, RIIWHS204D “Work safely at heights” or an equivalent preceding unit of competency, either completed within the last three years or have obtained a Certificate of Attendance for a “Work safely at heights” refresher course within the last three years; and
 - iv. if the activity requires entering an area that is or may be considered a confined space, RIIWHS202D “Enter and work in confined spaces” or an equivalent preceding unit of competency, either completed within the last three years or have obtained a Certificate of Attendance for an “Enter and work in confined spaces” refresher course within the last three years;

Note The determination of a confined space must be made by a person who meets the requirements described in item (c)iv.

- v. if the activity requires working with (i.e. drilling, moving, sanding or otherwise disturbing) an asbestos containing material, 10559NAT “Working Safely with Asbestos Containing Materials” either completed within the last three years or have obtained a Certificate of Attendance for “Working Safely With Asbestos Containing Materials” refresher training within the last three years;
 - vi. if the activity requires any work that is licensable by any applicable Act or authority, then that work must be undertaken by an appropriately licensed person. This includes but is not limited to work covered by the:
 - (1) *Construction Occupations (Licensing) Act 2004*; or
 - (2) Australian Refrigeration Council; and
- (d) any other training required by other legislation applicable to the activity.

4.4.2. Employee

If an authorised contractor is not a natural person, the authorised contractor must arrange for its employees who will be responsible for managing the engagement of installers, arranging or undertaking activities and reporting and record keeping for the purposes of the Scheme, to complete the induction course and any relevant activity specific training.

Note After the initial training of an authorised contractors' staff, new management staff do not necessarily need to attend induction training. However, it is recommended that they attend the general Scheme induction course as a minimum.

4.4.3. Representative

Before a representative other than an authorised contractor or authorised installer arranges or records an eligible activity, the representative must successfully complete—

- (a) any induction training for the Scheme and relevant activity required by the administrator under section 4.5; and
- (b) any other training required by other legislation applicable to the activity.

4.5. Scheme induction

Note on induction courses

Induction courses are not a substitute for training in the practical aspects of carrying out an eligible activity. Authorised installers must complete or have previously completed training in the competent undertaking of all eligible activities, or prescribed activity requirements, they will be carrying out. Attending an induction course for an activity is not sufficient to demonstrate competency in carrying out work associated with an eligible activity.

Before a retailer arranges or undertakes an eligible activity the retailer must arrange for its employees who will be responsible for managing the engagement of authorised contractors and authorised installers, arranging or overseeing the undertaking of eligible activities, managing customer contact and reporting and record keeping in accordance with the Act, to complete the general induction course and any relevant specific training prescribed for the activity.

Note For retailers based outside the ACT, an induction course may be offered by video conferencing or other means.

4.5.1. Contractor or installer

Before an authorised contractor or authorised installer arranges or undertakes an eligible activity, it must successfully complete—

- (a) the general induction course for the Scheme as arranged by the administrator; and
- (b) the induction course specific to the eligible activity the person will be undertaking.

Note 1 If a person is undertaking more than one eligible activity, the person must complete all relevant courses for that activity. For example, an authorised contractor undertaking building sealing, installation of standby power controllers, and installation of thermally efficient windows must undertake induction specific to each of those activities.

Note 2 The administrator may combine the induction for specific activities into a single course.

4.5.2. Employee

If an authorised contractor is not a natural person, the authorised contractor must arrange for its employees who will be responsible for managing the engagement of installers, arranging or undertaking activities, and reporting and record keeping in accordance with the Act, to complete the general induction and any relevant activity specific training.

4.5.3. Retailer

Retailers must—

- (a) ensure that an authorised contractor provides its employees who will be involved in functions relating to the Scheme, with sufficient information on the Act, the Scheme and the eligible activities the business will be undertaking for them to adequately undertake their respective functions; and

Note A person that is not undertaking the activity, but may be arranging or recording the activity, does not need to have detailed technical knowledge, but must have sufficient understanding of the activities and products to provide general information and to record all required information on the activity as required by their job.

- (b) provide an authorised seller and its employees who will be responsible for undertaking activities or other functions relating to the Scheme with sufficient information on the Act, the Scheme and the eligible activities the business will be undertaking for them to comply for them to adequately undertake their respective functions.

4.5.4. General induction

Employees of authorised contractors and authorised sellers may attend a general induction course and activity specific induction courses to satisfy the requirements of this section.

4.5.5. Confirmation of attendance

The administrator may request a retailer to confirm that a person requesting to attend an induction course has a demonstrated need to attend the course, including that the person is—

- (a) an authorised installer, authorised contractor or authorised seller;
- (b) a retailer, authorised contractor or authorised seller's employee or representative; or
- (c) licensed or otherwise qualified to undertake the work involved in undertaking the eligible activity or will be undertaking functions relating to the eligible activity to which the course relates.

The administrator may refuse a person who does not have a demonstrated need to attend an induction course entry to that course.

Note The Scheme requires that retailers undertake eligible activities and that the activities must comply with any approved code of practice including to be undertaken by authorised installers. The Scheme does not permit people with no connection to, or authorisation from, a retailer to undertake activities or complete records for the purposes of the Act. Induction courses are not intended for people who are carrying out similar work as part of a business or for people that are intending to apply to a retailer or an authorised contractor to offer services to those entities.

4.6. Safety training

An authorised contractor or authorised installer must undertake such training to comply with all relevant requirements under work health and safety law. For instance—

- (a) if working at heights is required, has completed RIIWHS204D "Work safely at heights" or an equivalent preceding unit of competency, either completed within the last three years or have obtained a Certificate of Attendance for a "Work safely at heights" refresher course within the last three years;
- (b) if construction work is required or there are risks of being exposed to asbestos, has completed 10675NAT "Asbestos awareness" or equivalent course; and
- (c) if entry to a roof cavity is required, has completed RIIWHS202D "Enter and work in confined spaces" or an equivalent preceding unit of competency, either completed within the last three years or have obtained a Certificate of Attendance for an "Enter and work in confined spaces" refresher course within the last three years.

If a course of training is prescribed by this code or work health and safety law, that course must be successfully completed by the relevant representatives to which the course applies, in the required timeframe.

Note In general, training must be completed before a person starts undertaking eligible activities. However, there may be times when the administrator or Work Safety Commissioner prescribes a course that must be completed by people already carrying out specific types of work within a specific timeframe.

If no course of training is prescribed, a retailer must provide sufficient training to relevant representatives to fulfil any obligations under the *Work Health and Safety Act 2011*.

Note 1 Builders, electricians, plumbers, gas fitters and other licensed persons will have completed work health and safety training relevant to their work. Unless otherwise prescribed by this code, that training is sufficient for the purposes of related activities under the Scheme.

Note 2 For eligible activities involving building sealing, installation of plug-in appliances, replacement of lamps, accredited training in 22311VIC – Course in Retrofitting for Energy and Water Efficiency delivered by a

Registered Training Organisation (RTO) with relevant scope is recommended. Details of this training can be found at <http://training.gov.au/Training/Details/> noting that some work covered by this course is licensable work in the ACT.

Note 3 Work health and safety risks for installers may include but are not limited to exposure to the sun, working alone, encountering aggressive people, working at heights, working in confined spaces, working near certain building services, and working where asbestos may be found.

4.7. Other relevant training and licensing

An authorised contractor or authorised installer must successfully complete, or have successfully completed, any required training to comply with all relevant requirements under other law applicable to the activity.

In addition—

- (a) if a course of training for a person undertaking a certain eligible activity is prescribed by this code, that course must be completed successfully by the relevant representatives undertaking that eligible activity;
- (b) representatives must hold any licences for the relevant work they will be undertaking required to comply with all relevant requirements under other law applicable to the activity;
- (c) a person must not undertake an eligible activity that requires a licence if that licence is lapsed, suspended, cancelled or conditioned in such a manner that the person cannot undertake the relevant work; and
- (d) if a licence is not required to undertake certain work under other relevant legislation, but is required by this code, the relevant representatives must hold that licence to undertake the work.

Note 1 ACT legislation requires that a person providing electrical, plumbing, gas fitting, gas or refrigerant gas servicing work must hold the appropriate class of licence as an individual. A company or partnership offering a construction service may also need to hold a licence in the relevant occupation class for the type of service. A general contractor licence is insufficient to cover work undertaken by individual practitioners.

Note 2 Building work requiring a licence must be undertaken by or under the supervision and control of a licensed builder with the appropriate class of licence.

Note 3 Licensing for construction occupations in the ACT is based on the type of work and not the value of the work. There is no minimum value of work that determines when a licence must be held.

Note 4 Where licensing of practitioners is not required, people undertaking the work must have sufficient skills and knowledge to carry out the work so that it is compliant with all requirements and does not adversely impact on other health, safety, amenity or environmental standards that apply to the building or its services.

4.8. Administrator may specify units of competency

The administrator may specify that certain units of competency listed in the Australian Quality Training Framework are required for safety or competency reasons by people undertaking certain eligible activities.

A specified unit of competency must be listed in this code.

A retailer must ensure that all individuals undertaking relevant prescribed activities for or on behalf of the retailer have been assessed as competent in all the applicable units of competency specified by the administrator under this section 4.8.

4.9. Evidence of training and licences

A retailer must keep records of the training its representatives have completed and evidence of any required licences held by a representative.

Note Evidence may include a certificate of competency from a RTO, confirmation of completion of an induction course, or a copy of a relevant licence.

4.10. Direction regarding unsafe things

This section applies to anything inspected or seized under part 5 of the Act by an authorised person if the administrator is satisfied on reasonable grounds that the thing poses a risk to the health or safety of people or of damage to property or the environment.

The administrator may direct a retailer to make the thing safe, destroy or otherwise dispose of the thing.

The direction may state one or more of the following—

- (a) how the thing must be made safe, destroyed or otherwise disposed of;
- (b) how the thing must be kept until it is made safe, destroyed or otherwise disposed of; or
- (c) the period within which the thing must be made safe, destroyed or otherwise disposed of.

The administrator may give the direction orally, in writing or in electronic form.

However, if the administrator gives the direction orally, the administrator must give the notice in writing or in electronic form within two days after giving the notice orally.

4.11. Restriction of people – public safety

This section applies if a person engages in conduct, or demonstrates deficiency in a required competency, that the administrator decides, on reasonable grounds, presents or is likely to present a risk of death or injury to a person, significant harm to the environment or significant damage to property.

4.11.1. Examples

Examples of restriction circumstances—

- (a) An authorised installer who is not an electrician is undertaking electrical wiring work in consumers' premises.
- (b) An inspection of the installation of sealing to a ventilation opening shows that a person has undertaken the work without the required building approval and has sealed a room in which there is a flueless gas heater. When questioned by the administrator, it is apparent that the person is not familiar with the requirements of the building code or the standards for ventilation for gas appliances and has undertaken a number of installations that are not compliant and may cause carbon monoxide poisoning or other problems for the occupants.
- (c) An installer is replacing a window and frame and disturbs friable asbestos. Although the installer has taken an asbestos awareness course, the installer is not a licensed asbestos assessor or an asbestos removalist. The installer attempts to remove the asbestos himself and places the removed asbestos in a normal garbage bin, releasing asbestos fibres into the air and causing a potential health problem to residents and other members of the public.
- (d) A retailer or authorised contractor employs unlicensed people to undertake gas fitting work.

Note An example is part of the code, is not exhaustive and may extend, but does not limit, the meaning of the provision in which it appears (see Legislation Act, s 126 and s 132).

4.11.2. Restrictions

The administrator may place a restriction on a person that—

- (a) prevents a person from undertaking an eligible activity;
- (b) prevents a person from undertaking certain prescribed activity requirements;
- (c) prevents a person from undertaking eligible activities or certain prescribed activity requirements without supervision; or
- (d) requires a person to undertake specific training, assessment or other remedial activity.

Examples of restriction circumstances—

- (a) After undertaking inspections on a number of solar water heater installations, the administrator determines that a number of installers employed by a particular authorised contractor have failed to install appropriate tempering devices making the installations unsafe. The administrator restricts the authorised contractor from undertaking solar water heater installations until its installers undertake remedial training and the contractor puts in place a quality assurance system for checking installations.
- (b) A retailer has been permitting unlicensed people to undertake degassing of refrigerators. The administrator may prevent the retailer from undertaking activities requiring the degassing of refrigerators until it can demonstrate that it has engaged suitably licensed people to undertake the work.

Note An example is part of the code, is not exhaustive and may extend, but does not limit, the meaning of the provision to which it relates (see Legislation Act, s 126 and s 132).

4.11.3. Notice of restriction

The person is restricted when the administrator gives the relevant retailer a notice that includes—

- (a) the name of the person to which the restriction applies;
- (b) the nature of the conduct or deficiency;
- (c) the nature of the risk;
- (d) the duration of the restriction;
- (e) the eligible activities, or prescribed activity requirements the restriction applies to; and
- (f) that the retailer may apply in writing to the administrator to revoke the restriction.

The administrator may give the notice orally, in writing or in electronic form.

However, if the administrator gives the notice orally, the administrator must give the notice in writing or in electronic form within two days after giving the notice orally.

Any restrictions on an authorised contractor, authorised seller or authorised installer must be reflected in the register required by section 3.10 of the record keeping and reporting code.

In this section, **person** in relation to a restriction means an authorised installer, an authorised contractor, an authorised seller, a member of a retailer's staff, or another individual that is a representative of a retailer that has functions relating to the Scheme.

4.12. End of restriction

This section applies if a person has been given a restriction under section 4.11.

4.12.1. Revoke

The administrator—

- (a) must revoke the restriction if satisfied that the cause of the restriction no longer exists;
- (b) may revoke the restriction if satisfied that the circumstance that caused the restrictions will not put consumers of the person's services at a greater risk from using the services than if the thing had not happened; and
- (c) must review the restriction three months after the day it begins, unless otherwise revoked.

4.12.2. Continuation

The administrator may continue the restriction after the three months if—

- (a) not satisfied that the cause of the restriction no longer exists;
- (b) the person has not complied with the restriction; or
- (c) the person has not completed any required training.

5. Activity performance specifications

5.1. Application of this section

This section applies to the general activity performance specifications that must be complied with when undertaking eligible activities for the purposes of meeting an energy savings obligation under the Act.

5.2. Compliance with activity requirements

An eligible activity must be undertaken so that it complies with—

- (a) all applicable requirements in the Act, relevant approved codes of practice and other relevant legislation; and
- (b) all relevant minimum activity performance specifications for the eligible activity prescribed in the eligible activities determination and the relevant section of this code.

Note 1 The requirements in this code are in addition to the provisions for the activity in the eligible activities determination.

Note 2 The minimum activity performance specifications for each activity in the eligible activities determination generally prescribe that the activity be completed and certified in accordance with the relevant code or codes of practice and other relevant legislation applying to the activity, including any licensing, registration, statutory approval, activity certification, health, safety, environmental or waste disposal requirements.

If installing a product, the installation must be done in accordance with manufacturer's instructions.

5.3. Operation within competency and knowledge

A retailer or a retailer's representative must—

- (a) not provide information or undertake work outside the scope of their expertise, training or licence authorisation, where applicable;
- (b) not provide advice on compliance with statutory requirements or otherwise imply that recommended activities will comply with applicable statutory requirements, or that statutory approvals will be granted for relevant activities, unless they hold a relevant licence or authority to provide such advice; and
- (c) refer consumers to relevant government agencies or appropriately qualified people for specialised advice.

Note Representatives must not assume or state to clients that statutory approvals will be granted for recommended activities and must refer enquiries to relevant authorities or to complete any required applications for approval.

5.4. Representative to allow sufficient time for activity

For an eligible activity that requires the installation of a product by an authorised installer, a representative arranging or undertaking the eligible activity must give the consumer a reasonable estimate of the time it will take to carry out the prescribed activity requirements that will be undertaken on site at the consumer's premises.

A representative arranging or undertaking an eligible activity must allow sufficient time to complete all prescribed activity requirements and other relevant requirements that apply to the activity.

5.5. Risk treatment steps if friable asbestos is identified

If an approved installer identifies friable asbestos while delivering an eligible activity, they need to follow the risk treatment steps listed below—

- (a) Stop work.

- (b) Notify immediate supervisor.
- (c) Notify the principle contractor.
- (d) The principle contractor should notify the retailer.
- (e) Notify Worksafe ACT and request a five-day notification waiver, according to section 466 of the *Work Health and Safety Regulation 2011*.
- (f) Notify all persons listed under section 467(3) of the *Work Health and Safety Regulation 2011*.
- (g) The principle contractor should inform the owner and tenant of the residential premises. Unless the following actions are undertaken, then this residential premise is no longer eligible for any Scheme activities. Once it is identified that friable asbestos may be present the following steps should be completed to ensure that it is safe for work to continue.

Note The home owner is responsible for all costs of inspections and/or removal of asbestos.

- (h) A licensed asbestos assessor is engaged by the home owner to verify whether asbestos is, or is not, present. (See list of accredited licensed asbestos assessors at <https://www.accesscanberra.act.gov.au/app/services/licence/#/>).
- (i) If verified, by a licensed asbestos assessor, that there is no asbestos, inform the principle contractor. The principle contractor can now deliver these insulation activities and other Scheme activities at this residential premises.
- (j) If verified that there is asbestos by the licensed asbestos assessor, notify the home owner and engage the services of a licensed asbestos removalist who requests a five-day notification waiver to remove the asbestos.
- (k) The site must be made safe via appropriate removal of the asbestos by a licensed asbestos removalist and clearance certificate issued by a licensed asbestos assessor. (See list of accredited licensed asbestos assessors and removalists at <https://www.accesscanberra.act.gov.au/app/services/licence/#/>).
- (l) Have asbestos removed by a licensed asbestos removalist once approval by Access Canberra is given, five-day notification or waiver, whichever is applicable.
- (m) The asbestos removalist must still complete a five-day notification online form and forward to Worksafe ACT after the waiver is approved.
- (n) If, despite professional work to remove asbestos, it is deemed that the site could still be unsafe, because, for instance, of ongoing risks posed by loose fill asbestos insulation, then no Scheme insulation activity can be undertaken at the site. Access Canberra Worksafe and the ACT Government's Asbestos Taskforce (<http://www.asbestostaskforce.act.gov.au/home>) needs to be notified (by both the home owner and licensed asbestos assessor) to determine if the residence may need to be added to the ACT Asbestos Taskforce list and whether further assessment and appropriate remediation measures undertaken. This residential dwelling continues to not be eligible for any Scheme activities.
- (o) Where a clearance certificate is issued by the asbestos assessor, Worksafe ACT needs to be provided with the clearance certificate.
- (p) The home owner can then re-contact the ACT electricity retailer and principle contractor and invite them to proceed with the insulation installation under this Scheme activity. The home owner needs to share appropriate evidence with the principle contractor. This evidence needs to be documented by the retailer, evidencing that all asbestos was removed and a copy of the clearance certificate was provided before any further work was undertaken.

SECTION B: ACTIVITY DETAILS

1. Residential building envelope activities

1.1. Building sealing activities

1.1.1. Application of this section

This section applies to undertaking Activity 1.1 – building sealing activities – as defined in section 1.1 of the eligible activities determination—

In accordance with the prescribed minimum activity performance specifications, restrict the air infiltration into, or air leakage out of, a premises by installation of fixed sealing to one or more of—

- (a) **Activity ID 1.1(a)** – the gaps between an external door leaf and the door frame and floor when the door is closed;
- (b) **Activity ID 1.1(b)** – the gaps between an openable window sash and the window frame when the window is closed; or
- (c) **Activity ID 1.1(c)** – the outlet of a ducted evaporative cooling system located in a heated area of the dwelling on a temporary or seasonal basis in the form of a product designed to cover the ceiling outlet.

Note A building sealing activity must only occur where it restricts air flow into or out of the premises.

1.1.2. Competency requirements

Activity 1.1 must be carried out by an authorised installer who has completed all required training prescribed in section A.4.

An authorised installer must be trained in the physical practice of building sealing and have all relevant competencies in building sealing including, but not limited to, competency in—

- (a) determining if an existing building seal or cover is present and effective;
- (b) assessing a surface material or structure for suitability for sealing or use of relevant products;
- (c) installing and testing for an effective seal;
- (d) understanding ventilation requirements in the building code and AS/NZS 5601;
- (e) identifying whether there is a standard flueless gas appliance (see note) or a gas connection that could be used for a flueless gas appliance in the room;

Note 'Flueless gas appliances' can include gas cooktops/stoves.

- (f) understanding and communicating to consumers the need for adequate ventilation to avoid condensation in buildings, as detailed in a range of handbooks (see note); and
- (g) understanding and communicating to consumers instructions on the installation and removal of ducted evaporative cooling system covers and the time of year that the product should be installed and removed.

Note Relevant handbooks on condensation include the Handbook: Condensation in Buildings by the Australian Building Codes Board; Tasmanian Government's Condensation In Buildings: Tasmanian Designers' Guide.

1.1.3. Determining eligibility of premises

A premises is an eligible residential premises for a building sealing activity if—

- (a) the premises is a residential premises as defined in the eligible activities determination;
- (b) the premises has at least one unsealed external door leaf, external window sash or ducted evaporative cooling system outlet, that—
 - i. does not have an effective fixed weather or air seal installed but to which an effective seal can be installed;
 - ii. is not located in a room that contains a flueless gas appliance or a connection that could be used for a flueless gas appliance; and
 - iii. is not prevented from being sealed by a ventilation requirement in relevant legislation; and
- (c) the premises is not required to have weather sealing installed to doors or windows, or sealed covers fitted to ducted evaporative cooling system outlets, under the *Building Act 2004*.

Note 1 The 2016 National Construction Code requires that a building is adequately sealed. If a building, or part of a building, was approved under that version or subsequent versions of the code it must have building sealing to doors and windows unless prevented from doing so by ventilation requirements. It is not intended that the EEIS be used to fix deficient work by a builder that may be fixed under warranty.

Note 2 There is no defined limit for the number of doors and windows that may be sealed other than the natural limit of the number of external doors and windows in a building. If the number of units claimed seems significantly higher than what would be present in a normal house, the administrator may request further information on the activity or conduct an inspection.

1.1.4. Minimum activity performance specifications

The minimum specifications for building sealing activity to be a compliant eligible activity are the minimum activity performance specifications in section 1.1.2 of the eligible activities determination and the provisions in this section of this code.

In addition—

- (a) the installed product must meet the installed product requirements in section 1.1.3 of the eligible activities determination and have a product warranty of a minimum of five years;
- (b) with the exception of covers to ducted evaporative cooling system outlets, installed sealing products must be permanently fixed;
- (c) in the case of ducted evaporative cooling system outlet covers, the cover must be securely fixed in position with fixings that can be released without the need to use tools;
- (d) a building sealing activity must not be carried out in a room that contains a flueless gas appliance;
- (e) if the installer is not sure whether an existing appliance is flueless the installer must not install building sealing to a door or window in the relevant room;
- (f) if building sealing is installed in a room that does not contain a flueless gas appliance, but in which there is a connection that could be used for a flueless gas appliance, the installer must inform the consumer that there may be inadequate ventilation to install a flueless gas appliance;
- (g) the installer must assess the condition of the surface material and the structure to which sealing will be applied and prepare the surface in accordance with manufacturer's instructions before installing a sealing product, including to remove any existing sealing product that is no longer effective; and
- (h) an installer must not install sealing to a door or window, or a part of a door or window, if the condition of the structure or the surface material after it has been prepared will not form, or is not likely to maintain a permanent and effective seal for at least the period of the product warranty or the statutory warranty, whichever is the longest.

1.1.4.1. Examples

Examples of circumstances where building sealing must not be installed—

- (a) A window sash or frame is rotting and is in such a condition that the sealing will not permanently adhere to the surface even after standard preparation of the surface.
- (b) A door leaf or frame is warped and the sealing product an installer is using will not restrict air flow from the gaps the warping has caused between the door leaf and the frame.

Note 1 An example is part of the code, is not exhaustive and may extend, but does not limit, the meaning of the provision in which it appears (see Legislation Act, s 126 and s 132).

Note 2 The statutory warranty is the warranty provided for in the Australian Consumer Law.

1.1.4.2. Compliance

The authorised installer must ensure that the installation—

- (a) for rooms with gas appliances, complies with AS/NZS 5601, *Air supply to gas appliances*; and
- (b) is unlikely to cause excessive condensation in the building.

Note 1 If the eligible activity is undertaken in association with other eligible activities or other work in the premises the installer must make sure that the combination of the work does not result in air changes and ventilation that does not comply with the minimum standards.

Note 2 Inadequate ventilation can cause health problems for occupants. An installer must not reduce the ventilation below the standards set for occupant health and amenity.

Note 3 Structural and other problems can occur due to regular condensation that forms in a well-sealed and insulated building if inadequate ventilation is not available to allow the moist air to escape. This is more likely to occur in houses that are new or extensively renovated. Further information on condensation can be found in *Condensation in Buildings: Information Handbook 2011 published by the Australian Building Codes Board* (www.abcb.gov.au).

The authorised installer must verify that the installation is unlikely to cause excessive condensation in the building and communicate to consumers the need for adequate ventilation to avoid condensation in buildings.

1.1.4.3. Seek professional advice

If the installer is not sure that the installation maintains required air changes and ventilation the installer must consult—

- (a) for a room containing a gas appliance, an individual with an advanced gas fitter licence; or
- (b) for any rooms not containing a gas appliance, an individual with a building surveyor licence in an appropriate occupation class.

1.1.4.4. Testing

Installation of a sealing product must not interfere with the normal operation of the window or door to which it is fixed.

The authorised installer must test all products after installation to verify the product—

- (a) is correctly installed;
- (b) is operating correctly; and
- (c) does not interfere with the normal operation of the door or window to which it is fixed, or in the case of ducted evaporative cooling system outlet covers, does not interfere with the normal operation of the evaporative cooler when the cover is removed.

Note Bonded asbestos products are found on many residential and commercial buildings. These materials can become friable with age and pose additional risks requiring management controls beyond the scope of this code. If friable asbestos is found, risk treatment steps described in section A.5.5 should be followed.

1.1.5. Calculation of energy savings factor

The energy savings factor must be calculated in accordance with section 1.1.5 of the eligible activities determination.

Note Each door, window or evaporative cooling system outlet to which sealing has been installed can be counted once only.

1.1.6. Recording and reporting

For this activity the following information must be recorded—

- (a) all required information in section 7.3 for periodic activity reporting and section 8.2 for compliance period reporting of the record keeping and reporting code of practice;
- (b) the Activity ID;
- (c) the brand name and model number of each installed product;
- (d) for door sealing activity items, the number of activity item units (N) in doors sealed determined in accordance with section 1.1.5(a)ii of the eligible activity determination;
- (e) for window sealing activity items, the number of activity item units in m^2 of the total area of glazing sealed determined in accordance with section 1.1.5(b)ii of the eligible activity determination;
- (f) for ducted evaporative cooling system outlet sealing activity items, the number of activity item units (N) in ducted evaporative cooling system outlets sealed determined in accordance with section 1.1.5(c)ii of the eligible activity determination;
- (g) for multiple activity record forms, the authorised installer identifier of each installer that carried out the activity;
- (h) the type and certificate number of any statutory certification for the work or associated work, if applicable;
- (i) the energy savings factor for the activity calculated in accordance with section 1.1.5 of the eligible activities determination as in force at the time the activity was completed; and
- (j) all required declarations.

Note Certain requirements such as disposal of waste products, or lodgement of statutory certifications, may occur on a date subsequent to the date of installation of a product. All relevant information about the installation of the product should be completed immediately after the installation has been carried out. Information about the disposal of waste products may be recorded at a later time when it is complete.

1.2. Exhaust fan sealing activities

1.2.1. Application of this section

This section applies to undertaking Activity 1.2 – exhaust fan sealing activities – as defined in section 1.2 of the eligible activities determination—

In accordance with the prescribed minimum activity performance specifications, restrict the air infiltration into, or air leakage out of, a premises by one or more of—

- (a) **Activity ID 1.2(a)** – removing and decommissioning an exhaust fan that is not fitted with a self-closing sealing device and is installed in a ceiling or wall and replacing the removed exhaust fan with an exhaust fan fitted with a self-closing damper, flap, filter or other sealing product that allows airflow through the exhaust of the fan when the fan is operating, but restricts airflow when the fan is not operating; or
- (b) **Activity ID 1.2(b)** – fitting a product, being a self-closing damper, flap, filter or other sealing product that is designed to be fitted to an existing ceiling or wall exhaust fan so as to allow airflow through the exhaust of the fan when the fan is operating, but restrict airflow when the fan is not operating.

1.2.2. Competency requirements

Activity 1.2 must be carried out by an authorised installer who—

- (a) has an unrestricted ACT electrician licence issued under the *Construction Occupations (Licensing) Act 2004*;
- (b) has completed all required training prescribed in section A.4; and
- (c) is sufficiently trained to carry out the relevant activity and has all relevant competencies to undertake the activity including, but not limited to, competency in—
 - i. for Activity 1.2(a), the physical practice of installing new exhaust fans fitted with self-sealing devices;
 - ii. for Activity 1.2(b), fitting exhaust fan sealing devices to an existing exhaust fan currently without a seal;
 - iii. for Activity 1.2(a), determining if an existing exhaust fan is fitted with a self-closing sealing device;
 - iv. for Activity 1.2(b), determining whether a self-closing sealing device is compatible with an existing exhaust fan;
 - v. determining and identification of whether or not work would need to be done in a confined space;
 - vi. identifying whether there is a standard flueless gas appliance (see note) or a gas connection that could be used for a flueless gas appliance in the room;

Note 'Flueless gas appliances' can include gas cooktops/stoves.

- vii. understanding ventilation requirements in the building code and AS/NZS 5601;
- viii. understanding and communicating to consumers the need for adequate ventilation to avoid condensation in buildings, as detailed in a range of handbooks (see note);

Note Relevant handbooks on condensation include the Handbook: Condensation in Buildings by the Australian Building Codes Board; Tasmanian Government's Condensation In Buildings: Tasmanian Designers' Guide.

- ix. communicating to consumers when exhaust fan sealing may cause an increase in condensation or fire risk in the building;

Note Authorised installers also need to advise residents to check their smoke detectors and/or fire alarms are in working order.

- x. for Activity 1.2(a) managing and effectively communicating the risks to the resident of installing more powerful new exhaust fans to avoid creating negative pressure even if the appliance is flued;
- xi. for Activity 1.2(b), testing for an effective seal;
- xii. for Activity 1.2(b), if installing a product over either a ceiling exhaust fan/light or an exhaust fan/light/heating combination unit, the installer must test that the seal is open when the lighting or lighting/heating element is on, respectively;
- xiii. if the activity requires working at heights, the authorised installer must have completed RIIWHS204D “Work safely at heights” or an equivalent preceding unit of competency, either within the last three years or have obtained a Certificate of Attendance for a “Work safely at heights” refresher course within the last three years;
- xiv. if the activity requires entering the ceiling cavity, the authorised installer must also have completed RIIWHS202D “Enter and work in confined spaces” or an equivalent preceding unit of competency, either completed within the last three years or have obtained a Certificate of Attendance for an “Enter and work in confined spaces” refresher course within the last three years; and
- xv. if the activity requires construction work, the authorised installer must be the holder of a General Construction Induction Card and must have completed 10675NAT “Asbestos awareness” or an equivalent course.

1.2.3. Determining eligibility of premises

A premises is an eligible residential premises for Activity 1.2 if—

- (a) the premises is not listed on the affected residential premises register;
- (b) the premises is a residential premises as defined in the eligible activities determination;
- (c) each exhaust fan to be fitted with a sealing device or replaced is not fitted with a self-closing sealing device;
- (d) each exhaust fan to be fitted with a sealing device is not in a room that—
 - i. contains a flueless gas appliance; or
 - ii. contains a gas appliance if the authorised installer does not know, or cannot determine, if the appliance is a flueless gas appliance; and
- (e) each exhaust fan to be fitted with a sealing device is in a room with an openable external window or door.

1.2.4. Minimum activity performance specifications

The minimum specifications for exhaust fan sealing activity to be a compliant eligible activity are the minimum activity performance specifications in section 1.2.2 of the eligible activities determination and the provisions in this section of this code.

In addition—

- (a) the installed product must meet the installed product requirements section 1.2.3 of the eligible activities determination and have a product warranty of a minimum of five years;
- (b) the product must be installed in accordance with the manufacturer’s instructions and any other relevant legislation and standards;
- (c) if there is an inconsistency between the manufacturer’s instructions, the requirements of this code or relevant legislation and standards that apply to the activity, the most stringent requirement applies to the extent of the inconsistency;
- (d) all eligible exhaust fans at premises must be fitted with a sealing device, if practical;

- (e) if an exhaust fan sealing device is installed in a room that does not contain a flueless gas appliance, but in which there is a connection that could be used for a flueless gas appliance, the authorised installer must inform the consumer that there may be inadequate ventilation to install a flueless gas appliance;
- (f) for Activity ID 1.2(a), the authorised installer must ensure that there is no risk of causing negative pressure through installation of new more powerful exhaust fans with sealing systems (see section 1.2.2);
- (g) the authorised installer must verify that the installation is unlikely to cause excessive condensation in the building and communicate to consumers the need for adequate ventilation to avoid condensation in buildings;
- (h) the authorised installer must communicate to consumers when exhaust fan sealing may cause an increase to fire risk in the building;
- (i) for Activity 1.2(b), the authorised installer must advise the consumer if the sealing device to be fitted to the exhaust fan may impact the warranty for the exhaust fan; and
- (j) if the exhaust fan is in a room with a flued gas appliance, the authorised installer must obtain certification that the installation complies with AS/NZS 5601 *Part 1 Section 6.4 Air supply to gas appliances* from an individual with an ACT gas fitter or gas appliance worker licence issued under the *Construction Occupations (Licensing) Act 2004* that authorises unsupervised gas fitting or gas appliance work on Type A gas appliances.

1.2.4.1. Testing

The authorised installer must test all products after installation to verify—

- (a) the product is correctly installed;
- (b) the product is operating correctly;
- (c) for Activity 1.2(b), the sealing device does not interfere with the safe and effective operation of the fan; and
- (d) if the exhaust fan is above (or includes) a heating element (see note 1), that the seal is open when the heating element is on.

Note 1 A 'heating element' includes any lamps specifically designed for heating purposes, otherwise known as 'heat lamps'.

Note 2 Bonded asbestos products are found on many residential and commercial buildings. These materials can become friable with age and pose additional risks requiring management controls beyond the scope of this code. If friable asbestos is found, risk treatment steps described in section A.5.5 should be followed.

1.2.5. Calculation of energy savings factor

The energy savings factor must be calculated in accordance with section 1.2.5 of the eligible activities determination.

1.2.6. Recording and reporting

For this activity the following information must be recorded—

- (a) all required information in section 7.3 for periodic activity reporting and section 8.2 for compliance period reporting of the record keeping and reporting code of practice;
- (b) the Activity ID;
- (c) the brand name and model number of each installed product;
- (d) for replacing exhaust fans, the number of activity item units (*N*) determined in accordance with section 1.2.5(a)ii of the eligible activities determination;
- (e) for sealing exhaust fans, the number of activity item units (*N*) determined in accordance with section 1.2.5(a)ii of the eligible activities determination;

- (f) for multiple activity record forms, the authorised installer identifier of each installer that carried out the activity;
- (g) the ACT electrician licence number of the authorised installer;
- (h) for any electrical work, the number of the relevant Certificate of Electrical Safety completed for the work in accordance with the *Electricity Safety Act 1971*;
- (i) the type and certificate number of any other statutory certification for the work or associated work, if applicable;
- (j) the licence or registration number (however described), if applicable, of each person who provided a statutory certification; and
- (k) the energy savings factor for the activity calculated in accordance with section 1.2.5 of the eligible activity determination as in force at the time the activity was completed.

1.3. Ventilation opening sealing activities

1.3.1. Application of this section

This section applies to undertaking Activity 1.3 – ventilation opening sealing – as defined in section 1.3 of the eligible activities determination—

In accordance with the prescribed minimum activity performance specifications, restrict the air infiltration into, or air leakage out of, a premises by carrying out one or more of—

- (a) **Activity ID 1.3(a)** – installing a sealing product or products to permanently seal ventilation openings in an external wall, other than external wall openings to underfloor enclosures; or
- (b) **Activity ID 1.3(b)** – installing a damper or flap in a chimney or flue of an open solid fuel burning appliance that can be closed to seal the chimney or flue.

1.3.2. Competency requirements

Activity 1.3 must be carried out by an authorised installer who—

- (a) has completed all required training prescribed in section A.4;
- (b) is sufficiently trained to carry out the relevant activity and has all relevant competencies to undertake the activity including, but not limited to, competency in—
 - i. for Activity 1.3(a), the physical practice of installing a sealing product or products to permanently seal ventilation openings in an external wall;
 - ii. for Activity 1.3(b), the physical practice of installing a damper or flap in a chimney or flue of an open solid fuel burning appliance;
 - iii. determining and identification of whether or not work would need to be done in a confined space or at heights;
 - iv. identifying whether there is a standard flueless gas appliance (see note) or a gas connection that could be used for a flueless gas appliance in the room;

Note 'Flueless gas appliances' can include gas cooktops/stoves.

- v. understanding ventilation requirements in the building code and AS/NZS 5601;
- vi. understanding and communicating to consumers the need for adequate ventilation to avoid condensation in buildings, as detailed in a range of handbooks (see note).

Note Relevant handbooks on condensation include the Handbook: Condensation in Buildings by the Australian Building Codes Board; Tasmanian Government's Condensation In Buildings: Tasmanian Designers' Guide.

- vii. if the activity requires working at heights, the authorised installer must have completed RIIWHS204D "Work safely at heights" or an equivalent preceding unit of competency, either completed within the last three years or have obtained a Certificate of Attendance for a "Work safely at heights" refresher course within the last three years;
- viii. if the activity requires entering the ceiling cavity, the authorised installer must also have completed RIIWHS202D "Enter and work in confined spaces" or an equivalent preceding unit of competency, either completed within the last three years or have obtained a Certificate of Attendance for an "Enter and work in confined spaces" refresher course within the last three years; and
- ix. if the activity requires construction work, the authorised installer must be the holder of a General Construction Induction Card and must have completed 10675NAT "Asbestos awareness" or an equivalent course.

1.3.3. Determining eligibility of premises

A premises is an eligible premises for Activity 1.3 if—

- (a) the premises is a residential premises as defined in the eligible activities determination;
- (b) the premises has at least one—
 - i. ventilation opening in an external wall that can be permanently sealed, other than external wall opening to underfloor enclosures; or
 - ii. an open solid fuel burning appliance that can be sealed by the installation of a damper or flap in a chimney or flue; and
- (c) each ventilation opening sealing product being installed is not in, or in the external wall of, a room that—
 - i. contains a flueless gas appliance; or
 - ii. contains a gas appliance that the authorised installer does not know, or cannot determine, if the appliance is a flueless gas appliance.

1.3.4. Minimum activity performance specifications

The minimum specifications for Activity 1.3 to be a compliant eligible activity are the minimum activity performance specifications in section 1.3.2 of the eligible activities determination and the provisions in this section of this code.

In addition—

- (a) the installed product shall meet the installed product requirements in section 1.3.3 of the eligible activities determination;
- (b) installed ventilation opening sealing products must be permanently fixed;
- (c) a ventilation opening sealing activity must not be carried out in a room that contains a flueless gas appliance;
- (d) if the installer is not sure whether an existing appliance is flueless the installer must not install ventilation opening sealing products; and
- (e) if a ventilation opening sealing product is installed in a room that does not contain a flueless gas appliance, but in which there is a connection that could be used for a flueless gas appliance, the installer must inform the consumer that there may be inadequate ventilation to install a flueless gas appliance.

1.3.4.1. Compliance

The authorised installer must ensure that the installation—

- (a) for rooms with gas appliances, complies with AS/NZS 5601 *Section 6.4 Air supply to gas appliances*; and
- (b) is unlikely to cause excessive condensation in the building.

Note 1 If the eligible activity is undertaken in association with other eligible activities or other work in the premises the installer must make sure that the combination of the work does not result in air changes and ventilation that does not comply with the minimum standards.

Note 2 Inadequate ventilation can cause health problems for occupants. An installer must not reduce the ventilation below the standards set for occupant health and amenity.

Note 3 Structural and other problems can occur due to regular condensation that forms in a well-sealed and insulated building if inadequate ventilation is not available to allow the moist air to escape. This is more likely to occur in houses that are new or extensively renovated. Further information on condensation can be found in Condensation in Buildings: Information Handbook 2011 published by the Australian Building Codes Board (www.abcb.gov.au).

The authorised installer must verify that the installation is unlikely to cause excessive condensation in the building and communicate to consumers the need for adequate ventilation to avoid condensation in buildings.

1.3.4.2. Seek professional advice

If the installer is not sure that the installation maintains required air changes and ventilation the installer must consult—

- (a) for a room containing a gas appliance, an individual with an advanced gas fitter licence; or
- (b) for any rooms not containing a gas appliance, an individual with a building surveyor licence in an appropriate occupation class.

1.3.4.3. Testing

The authorised installer must test all products after the installation of a ventilation opening sealing product to verify that the product—

- (a) is correctly installed; and
- (b) is operating correctly.

Note Bonded asbestos products are found on many residential and commercial buildings. These materials can become friable with age and pose additional risks requiring management controls beyond the scope of this code. If friable asbestos is found, risk treatment steps described in section A.5 should be followed.

1.3.5. Calculation of energy savings factor

The energy savings factor must be calculated in accordance with section 1.3.5 of the eligible activities determination.

1.3.6. Recording and reporting

For Activity 1.3 the following information must be recorded—

- (a) the Activity ID;
- (b) the brand name and model number of each installed product;
- (c) for ventilation opening sealing, the activity item units (*N*) being the number of vents sealed determined in accordance with section 1.3.5(a)ii of the eligible activities determination;
- (d) the location in the premises of ventilation openings sealed;
- (e) for chimney and flue sealing, the activity item units (*N*) being the number of chimneys and flues sealed determined in accordance with section 1.3.5(a)iii of the eligible activities determination;
- (f) for multiple activity record forms, the authorised installer identifier of each installer that carried out the activity;
- (g) for work requiring a building approval, the licence number of the building certifier or certifiers that approved, inspected and certified the building work in accordance with the *Building Act 2004*;
- (h) the type and certificate number of any statutory certification for the work or associated work;
- (i) the licence or registration number (however described), if applicable, of each person who provided a statutory certification;
- (j) the energy savings factor for the activity calculated in accordance with section 1.3.5 of the eligible activities determination as in force at the time the activity was completed; and
- (k) the date of implementation, being the date all applicable prescribed activity requirements are completed.

1.4. Install a thermally efficient window

1.4.1. Application of this section

This section applies to undertaking Activity 1.4 – install a thermally efficient window – as defined in section 1.4 of the eligible activities determination—

Activity ID 1.4 – Installing high thermal performance glazing or glazed products in a window opening or glazed door or openings in an external wall of a conditioned zone to replace existing single glazed window/s that does not meet the minimum thermal performance requirements, so that the glazing fills the entire window opening or openings.

1.4.2. Competency requirements

Activity 1.4 must be carried out by an authorised installer who has completed all required training prescribed in section A.4.

An authorised installer must be trained in the physical practice of installing a thermally efficient window and have all relevant competencies in installing a thermally efficient window including, but not limited to, competency in—

- (a) determining whether or not a window in an external wall is for a conditioned zone;
- (b) determining whether existing single glazing meets the minimum thermal performance standards of the eligible activities determination for Activity 1.4; and
- (c) installing high thermal performance glazing products in a window opening.

1.4.3. Determining eligibility of premises

A premises is eligible for installing a thermally efficient window if—

- (a) the premises is a residential premises as defined in the eligible activities determination; and
- (b) the premises has one or more single glazed windows in an external wall of a conditioned zone.

1.4.4. Minimum activity performance specifications

The minimum specifications for installing a thermally efficient window to be a compliant eligible activity are the minimum activity performance specifications in section 1.4.2 of the eligible activities determination and the provisions in this section of this code.

In addition—

- (a) the installed product must meet the installed product requirements in section 1.4.3 of the eligible activities determination and have a product warranty of a minimum of five years;
- (b) all products must be installed in accordance with manufacturer's instructions;
- (c) the window must be installed in compliance with AS 2047 and AS 1288;
- (d) the window frame must be effectively sealed around its entire perimeter to prevent infiltration of outside air;
- (e) the window must be installed properly flashed into the existing structure to ensure no ingress of moisture around the frame perimeter; and
- (f) the authorised installer must test all products after installation to verify the product is correctly installed and is operating properly.

Note Bonded asbestos products are found on many residential and commercial buildings. These materials can become friable with age and pose additional risks requiring management controls beyond the scope of this code. If friable asbestos is found, risk treatment steps described in section A.5 should be followed.

1.4.5. Calculation of energy savings factor

The energy savings factor must be calculated in accordance with section 1.4.5 of the eligible activities determination.

1.4.6. Recording and reporting

For this activity the following information must be recorded and reported—

- (a) all required information in section 7.3 for periodic activity reporting and section 8.2 for compliance period reporting of the record keeping and reporting code of practice;
- (b) the Activity ID;
- (c) for each installed product—
 - i. the brand name and model number;
 - ii. the identifier given to the product under the Window Energy Rating System;
 - iii. the heating rating in stars given to the product under the Window Energy Rating System;
 - iv. the total U value, U_w , of the window as published in the Window Energy Rating system; and
 - v. the solar heat gain coefficient (SHGC) of the window as published in the Window Energy Rating system;
- (d) the activity item units, in m^2 , of area of glazing replaced determined in accordance with section 1.4.5(a)ii of the eligible activities determination;
- (e) for multiple activity record forms, the authorised installer identifier of each installer that carried out the activity;
- (f) for work requiring a building approval, the licence number of the building certifier or certifiers that approved, inspected and certified the building work in accordance with the *Building Act 2004*;
- (g) the type and certificate number of any statutory certification for the work or associated work;
- (h) the licence or registration number (however described), if applicable, of each person who provided a statutory certification; and
- (i) the energy savings factor for the activity calculated in accordance with section 1.4.5 of the eligible activities determination as in force at the time the activity was completed.

1.5. Retrofit thermally efficient glazing

1.5.1. Application of this section

This section applies to undertaking Activity 1.5 – retrofit thermally efficient glazing – as defined in section 1.5 of the eligible activities determination—

Activity ID 1.5 – Installing a product that improves the thermal efficiency of a window to one or more single glazed windows or glazed doors in an external wall of a conditioned zone where the existing glazing does not meet the minimum thermal performance requirements prescribed, so that the glazing product covers all panes of the window unit or units.

1.5.2. Competency requirements

Activity 1.5 must be carried out by an authorised installer who has completed all required training prescribed in section A.4.

An authorised installer must be trained in the physical practice of retrofitting thermally efficient glazing and have all relevant competencies in retrofitting thermally efficient glazing including, but not limited to, competency in—

- (a) determining whether or not a window in an external wall is for a conditioned zone;
- (b) determining whether existing glazing meets the minimum standards of the eligible activities determination for Activity 1.5; and
- (c) installing a retrofit glazing product so that it covers all panes of a window unit.

1.5.3. Determining eligibility of premises

A premises is an eligible residential premises for retrofitting thermally efficient glazing if—

- (a) the premises is a residential premises as defined in the eligible activities determination; and
- (b) the premises has one or more single glazed windows that do not meet the minimum standards of the eligible activities determination for Activity 1.5.

1.5.4. Minimum activity performance specifications

The minimum specifications for retrofitting thermally efficient glazing to be a compliant eligible activity are the minimum activity performance specifications in section 1.5.2 of the eligible activities determination and the provisions in this section of this code.

In addition—

- (a) the installed product must meet the installed product requirements in section 1.5.3 of the eligible activities determination and have a product warranty of a minimum of two years;
- (b) the product must be installed in accordance with manufacturer's instructions; and
- (c) the window must be installed in compliance with AS 2047 and AS 1288.

1.5.4.1. Testing

The authorised installer must test all products after installation to verify the product—

- (a) is correctly installed; and
- (b) does not interfere with the normal operation of the window.

Note Bonded asbestos products are found on many residential and commercial buildings. These materials can become friable with age and pose additional risks requiring management controls beyond the scope of this code. If friable asbestos is found, risk treatment steps described in section A5.5 should be followed.

1.5.5. Calculation of energy savings factor

The energy savings factor must be calculated in accordance with section 1.5.5 of the eligible activities determination.

1.5.6. Recording and reporting

For this activity, the following information must be recorded and reported—

- (a) all required information in section 7.3 for periodic activity reporting and section 8.2 for compliance period reporting of the record keeping and reporting code of practice;
- (b) the Activity ID;
- (c) for each installed product—
 - i. the brand name and model number;
 - ii. the product type being either glass, acrylic, or polycarbonate;
 - iii. the total U value, U_w , of the product (in combination with the existing window) as published in the Window Energy Rating System; and
 - iv. the solar heat gain coefficient (SHGC) of the product (in combination with the existing window) as published in the Window Energy Rating System;
- (d) the activity item units in m^2 of area of glazing installed determined in accordance with section 1.5.5(a)ii of the eligible activities determination;
- (e) for multiple activity record forms, the authorised installer identifier of each installer that carried out the activity;
- (f) for work requiring a building approval, the licence number of the building certifier or certifiers that approved, inspected and certified the building work in accordance with the *Building Act 2004*;
- (g) the type and certificate number of any statutory certification for the work or associated work;
- (h) the licence or registration number (however described), if applicable, of each person who provided a statutory certification; and
- (i) the energy savings factor for the activity calculated in accordance with section 1.5.5 of the eligible activities determination as in force at the time the activity was completed.

1.6. Install thermally efficient window coverings

1.6.1. Application of this section

This section applies to undertaking Activity 1.6 – install thermally efficient window coverings – as defined in section 1.6 of the eligible activities determination—

Activity ID 1.6 – Installing window coverings to a window in an external wall of a conditioned zone that fully cover the window and restrict the convective air flow from between the window covering and glazing to the internal space.

1.6.2. Competency requirements

Activity 1.6 must be carried out by an authorised installer who has completed all required training prescribed in section A.4.

An authorised installer must be trained in the physical practice of installing thermally efficient window coverings and have all relevant competencies in installing thermally efficient window coverings including, but not limited to, competency in—

- (a) determining whether a window is in the external wall of a conditioned zone;
- (b) determining whether existing curtains, drapes or blinds meet the installed product requirements of section 1.6.3 of the eligible activities determination; and
- (c) installing thermally efficient window coverings to a window.

1.6.3. Determining eligibility of premises

A premises is an eligible residential premises for installing thermally efficient window coverings if—

- (a) the premises is a residential premises as defined in the eligible activities determination; and
- (b) the premises has at least one external window on a conditioned zone which does not already have thermally efficient window coverings installed.

1.6.4. Minimum activity performance specifications

The minimum specifications for installing thermally efficient window coverings to be a compliant eligible activity are the minimum activity performance specifications in section 1.6.2 of the eligible activities determination and the provisions in this section of this code.

The installed product must meet the installed product requirements in section 1.6.3 of the eligible activities determination and have a product warranty of a minimum of two years.

1.6.4.1. Testing

The authorised installer must test all products after installation to verify the product—

- (a) is correctly installed in accordance with manufacturer's instructions;
- (b) is operating correctly; and
- (c) does not interfere with the normal operation of the window.

Note Bonded asbestos products are found on many residential and commercial buildings. These materials can become friable with age and pose additional risks requiring management controls beyond the scope of this code. If friable asbestos is found, risk treatment steps described in section A5.5 should be followed.

1.6.5. Calculation of energy savings factor

The energy savings factor must be calculated in accordance with section 1.6.5 of the eligible activities determination.

1.6.6. Recording and reporting

For this activity the following information must be recorded and reported—

- (a) all required information in section 7.3 for periodic activity reporting and section 8.2 for compliance period reporting of the record keeping and reporting code of practice;
- (b) the Activity ID;
- (c) the brand name and model number of each installed product or an indication of whether a product is custom made;
- (d) the type/s of each window coverings, being curtain or blind;
- (e) the activity item units in m² of area of glazing of the window or windows to which product has been installed determined in accordance with section 1.6.5(a) of the eligible activities determination;
- (f) for multiple activity record forms, the authorised installer identifier of each installer that carried out the activity;
- (g) the type and certificate number of any statutory certification for the work or associated work, if applicable;
- (h) the licence or registration number (however described), if applicable, of each person who provided a statutory certification; and
- (i) the energy savings factor for the activity calculated in accordance with section 1.6.5 of the eligible activities determination as in force at the time the activity was completed.

1.7. Install window pelmets

1.7.1. Application of this section

This section applies to undertaking Activity 1.7 – install window pelmets – as defined in section 1.7 of the eligible activities determination—

Activity ID 1.7 – Installing a box pelmet to a window in an external wall of a conditioned zone so that the pelmet fully encloses the top of an existing curtain or blind that meets the installed product requirements and restricts the convective air flow from beside or above the pelmet to the window.

1.7.2. Competency requirements

Activity 1.7 must be carried out by an authorised installer who has completed all required training prescribed in section A.4.

An authorised installer must be trained in the physical practice of installing window pelmets and have all relevant competencies in installing window pelmets including, but not limited to, competency in—

- (a) determining whether a window is in the external wall of a conditioned zone;
- (b) determining whether existing curtains or blinds meet the installed product requirements of section 1.6 of the eligible activities determination;
- (c) determining whether a product will restrict the convective air flow from beside or above a pelmet to a window; and
- (d) installing a box pelmet to fully enclose the top of an existing curtain, drape or blind.

1.7.3. Determining eligibility of premises

A premises is an eligible residential premises for installing window pelmets if—

- (a) the premises is a residential premises as defined in the eligible activities determination; and
- (b) the premises has at least one window in an external wall of a conditioned zone that has thermally efficient window coverings, but does not have a pelmet installed.

Note This activity can be conducted in conjunction with Activity 1.6 to ensure that a thermally efficient window covering is installed on the window before the pelmet is installed.

1.7.4. Minimum activity performance specifications

The minimum specifications for installing window pelmets to be a compliant eligible activity are the minimum activity performance specifications in section 1.7.2 of the eligible activities determination and the provisions in this section of this code.

The installed product must meet the installed product requirements in section 1.7.3 of the eligible activities determination and have a product warranty of a minimum of two years.

1.7.4.1. Testing

The authorised installer must test all products after installation to verify the product—

- (a) is correctly installed;
- (b) is operating correctly; and
- (c) does not interfere with the normal operation of the window coverings or the window.

Note Bonded asbestos products are found on many residential and commercial buildings. These materials can become friable with age and pose additional risks requiring management controls beyond the scope of this code. If friable asbestos is found, risk treatment steps described in section A5.5 should be followed.

1.7.5. Calculation of energy savings factor

The energy savings factor must be calculated in accordance with section 1.7.5 of the eligible activities determination.

1.7.6. Recording and reporting

For this activity the following information must be recorded and reported—

- (a) all required information in section 7.3 for periodic activity reporting and section 8.2 for compliance period reporting of the record keeping and reporting code of practice;
- (b) the Activity ID;
- (c) the type, brand name and model number of each installed product or an indication of whether a product is custom made including type;
- (d) the activity item units in m² of area of glazing of the window or windows to which the product has been installed determined in accordance with section 1.7.5(a) of the eligible activities determination;
- (e) for multiple activity record forms, the authorised installer identifier of each installer that carried out the activity;
- (f) the type and certificate number of any statutory certification for the work or associated work, if applicable;
- (g) the licence or registration number (however described), if applicable, of each person who provided a statutory certification; and
- (h) the energy savings factor for the activity calculated in accordance with section 1.7.5 of the eligible activities determination as in force at the time the activity was completed.

1.8. Install ceiling insulation

1.8.1. Application of this section

This section applies to undertaking Activity 1.8 – installing ceiling insulation – as defined in section 1.8 of the eligible activities determination—

Activity ID 1.8 – In accordance with the prescribed minimum activity performance specifications, installing a ceiling insulation product (new or top up) in a ceiling area above a room that is either uninsulated or under insulated (R value of 2.0 or less) within a residential premises.

1.8.2. Competency requirements

1.8.2.1. Authorised installer

Activity 1.8 must be carried out by an authorised installer who might be either—

- (a) an **authorised electrician** with an unrestricted ACT electrician licence issued under the *Construction Occupations (Licensing) Act 2004*, who will undertake a pre-installation electrical safety check and issue an electrical safety report to advise on whether ceiling insulation installation can safely proceed;
- (b) an **authorised insulation installer**, who will carry out the installation of ceiling insulation; or
- (c) an **independent insulation installation auditor**, who will carry out onsite audits of ceiling insulation installations.

1.8.2.2. Competencies

All parties involved in the undertaking of this activity must have completed all required training and licensing prescribed in section A.4.

Required general competencies include, but are not limited to—

- (a) identifying whether there is a standard flueless gas appliance or a gas connection that could be used for a flueless gas heating appliance; and
- (b) identifying the difference between cellulose and non-cellulose insulation and determining if existing insulation should be removed prior to installation of new or top-up insulation.

Note A competent person with the appropriate equipment must be engaged for the removal of existing cellulose-based blow-in/loose fill insulation.

1.8.2.2.1. Electrician competencies

The **authorised electrician** must be competent in—

- (a) carrying out an electrical safety check described in the minimum activity performance specifications and required remediation works in compliance with the ACT Electrical Safety Act, codes of practice and all relevant standards, such as AS/NZS 3000;
- (b) replacing halogen downlights and incandescent lighting with light emitting diode (LED) downlights, in accordance with Activity 4.1; and
- (c) providing suitable evidence, as determined by the administrator, that all electrical safety requirements have been achieved prior to the installation of insulation.

1.8.2.2.2. Insulation installer competencies

The **authorised insulation installer** must hold current Energy Efficiency Council (EEC) Certified Insulation Installer certification.

The **authorised insulation installer** must be competent in—

- (a) turning off the mains power at the customer meter board, testing for de-energisation of relevant circuits with a voltage detector, implementing lock out and tag and, once their work has finished, restoring power supply to fulfil the requirements of the current version of AS/NZS 3000;
- (b) interpreting and understanding the electrical safety report issued by the licensed electrician, such as identifying mains cables and cables from solar installations running through the roof space, or other potential electrical safety hazards;
- (c) installing insulation in accordance with the installation instructions provided by the manufacturer; and
- (d) determining if—
 - i. existing ceiling can support insulation loads or additional loads for new and top-up insulation;
 - ii. there are any physical barriers to installation of R5.0 batts; and
 - iii. thinner perimeter batts would be needed.

1.8.2.2.3. Insulation installation auditor competencies

The **independent insulation installation auditor(s)** must—

- (a) have undertaken the following units of competency within the last three years—
 - i. CPCCOHS2001A Apply OHS requirements policies and procedures in the construction industry;
 - ii. CPCCCM1015A Carry out Measurements and Calculations;
 - iii. CPCCCM2010B Work Safely at Heights;
 - iv. CPCCPB3014A Install Batt Insulation Products; and
 - v. CPCCPB3027A Install Ceiling Insulation;

Note Independent auditors do not need to meet the practical insulation installation requirements of the course or hold an EEC Certified Insulation Installer certification.

- (b) be competent in—
 - i. turning off the mains power at the customer meter board, testing for de-energisation of relevant circuits with a voltage detector, implementing lock out and tag and, once their work has finished, restoring power supply to fulfil the requirements of the current version of AS/NZS 3000; and
 - ii. interpreting and understanding the electrical safety report issued by the licensed electrician, such as identifying mains cables and cables from solar installations running through the roof space, or other potential electrical safety hazards; and
- (c) have at least one year experience either being—
 - i. a residential insulation auditor for either insulation companies or other insulation government programs;
 - ii. an accredited insulation installer with a good safety record;
 - iii. a building surveyor with experience auditing residential insulation upgrades or new build installation; or
 - iv. a licensed electrician with experience undertaking electrical safety checks for insulation programs or insulation installations.

1.8.3. Determining eligibility of premises

A premises is an eligible residential premises for Activity 1.8 if—

- (a) it is defined in the National Construction Code (The Building Code of Australia) as either:
 - i. Building Class 1a(i); or
 - ii. Building Class 1a(ii), if located on single allotments, i.e. if services associated with one title are not passing through different titles from end to end on the allotment;

(b) it is either —

- i. an uninsulated ceiling space, defined as having no existing insulation products installed; or
- ii. an under-insulated ceiling space, defined as having existing insulation of less than or equal to material R value of 2.0;

Note Material R value of 2.0 is defined as ceiling insulation that constitutes $\leq 100\text{mm}$ in thickness.

- (c) there are no flueless gas appliances or gas connections (Bayonet fittings) that could be used for flueless gas heating appliances in the premises; and

Note Any existing flueless gas appliance must be removed and the gas line permanently sealed prior to the undertaking of this activity. Costs for this work shall be borne entirely by the customer and must not be part of pass through costs generally attributed to the EEIS.

- (d) it is not listed as a Mr Fluffy house on <http://www.asbestostaskforce.act.gov.au/the-list/search-list>.

1.8.4. Minimum activity performance specifications

The minimum specifications for Activity 1.8 to be a compliant eligible activity are the minimum activity performance specifications in section 1.8.2 of the eligible activities determination and the provisions in this section of this code.

The products must—

- (a) be installed below an exposed roof, i.e. not between floors;
- (b) be applied only in ceiling spaces not directly above any garage, shed, greenhouse or the like, whether attached or not;
- (c) be applied to at least 95 per cent of accessible eligible areas excluding garages, sheds, greenhouses or the like; and
- (d) be installed in accordance with the manufacturer's instructions and any other relevant legislation and standards, including but not limited to, the requirements of the current versions of AS 3999 and AS/NZS 3000 (as applicable).

Note 1 In particular, pre-installation electrical safety check and other safety and risk assessment procedures, electrical safety provisions and provisions for limiting moisture ingress of AS 3999 shall be observed.

Note 2 If there is an inconsistency between the manufacturer's instructions, the requirements of this code or relevant legislation and standards that apply to the activity, the most stringent requirement applies to the extent of the inconsistency.

1.8.4.1. Pre-installation electrical safety check

Prior to the installation of ceiling insulation, a pre-installation electrical safety check must be completed and an electrical safety report signed by a licensed electrician in accordance with the codes of practice and the approved electricity retailer's Safe Work Method Statements (SWMS) for this activity. This must include, but is not limited to, ensuring that—

- (a) there is no unsafe wiring and that the wiring is rated correctly;
- (b) mains and solar cables running rough the roof space are identified;
- (c) if recessed luminaires are installed in an accessible roof space, a permanent and legible warning sign is installed in accordance with the current version of AS/NZS 3000;

- (d) the installation of ceiling insulation will not lead to any electrical wiring or circuits being materially adversely affected or becoming non-compliant with the current version of AS/NZS 3000;
- (e) if electrical safety risks are found to be present, remediation works are performed to comply with the ACT Electrical Safety Act, all relevant standards such as AS/NZS 3000, and relevant sub-sections of the approved electricity retailer's SWMS prior to the installation of insulation;
- (f) any incandescent or halogen downlights installed in the ceiling areas to be insulated are replaced by light emitting diode (LED) downlights, in accordance with Activity 4.1, prior to the installation of insulation;

Note If iron core transformers are present, the licensed electrician must lift the transformer above the ceiling by clipping it securely to a truss member.

- (g) clearance around ceiling penetrations such as recessed luminaires must be kept to the minimum permitted by the current versions of AS/NZS 3000 and AS 3999;
- (h) if the premises does not have a Residual Current Device (RCD) installed in the relevant circuit/s affected by the ceiling insulation installation, an RCD must be installed for that affected circuit/s prior to the installation of insulation; and
- (i) live sub-mains for other units in the unit being worked on are identified and de-rated where required.

Note 1 A copy of the electrical safety report issued by the licensed electrician must be provided to the insulation installer and independent auditor before work commences and a copy kept on site and easily accessible by all parties involved in undertaking this activity.

Note 2 Costs for any electrical remediation works shall be borne entirely by the customer and must not be part of pass through costs generally attributed to the EEIS.

Suitable evidence, as determined by the administrator, must be obtained stating that all electrical safety requirements have been achieved prior to the installation of ceiling insulation.

1.8.4.2. Before and during installation

Cellulose-based blow-in/loose-fill insulation must be identified and removed by a competent person before the installation of new approved insulation products, in accordance with Safe Work Australia's Workplace Exposure Standards for Airborne Contaminants and related codes and guides.

When installing insulation around or near electrical or mechanical appliances, other than recessed luminaires, the authorised installer must ensure that installation of insulation does not impede the safe operation of the equipment.

The undertaking of this activity shall not compromise the condensation management of the building. Reference should be made to the provisions in the Australian Building Codes Board publication, *Condensation in buildings – Information handbook*.

If any party involved in the undertaking of this activity notices any damage to a fire wall, this must be reported to Access Canberra.

1.8.4.3. Pre-installation safety check

Prior to the installation of ceiling insulation, insulation installer(s) must undertake a safety check aligned with the approved electricity retailer's SWMS for this activity. As part of the safety check the insulation installer needs to pro-actively manage risks, which can include, but are not limited to—

- (a) interpreting and understanding the electrical safety report issued by the licensed electrician;
- (b) working at heights;
- (c) falling through ceilings;
- (d) working in a poorly ventilated workspace in hot weather;

- (e) working in confined spaces;
 - (f) materials handling, and exposure to hazardous materials, including asbestos;
- Note If friable asbestos is found, risk treatment steps described in section A5.5 should be followed.*
- (g) electrocution, by recording the source of electrical power to the home, and any related power equipment such as solar power;
 - (h) de-energising and isolating power at the mains;
 - (i) testing for de-energisation by checking the lights and testing the cables and power points with a voltage detector;
 - (j) implementing lock out and tag before installation; and
 - (k) other OH&S risks by including appropriate workplace health and safety risk control measures as appropriate.

1.8.4.4. Other requirements

All waste material must be removed from the site and recycled if practical or disposed of appropriately.

The authorised installer must verify if the product is correctly installed in accordance with requirements and the manufacturer's instructions manual.

Note Bonded asbestos products are found on many residential and commercial buildings. These materials can become friable with age and pose additional risks requiring management controls beyond the scope of this code. If friable asbestos is found, risk treatment steps described in section A.5 should be followed.

1.8.5. Calculation of energy savings factor

The energy savings factor must be calculated in accordance with section 1.8.5 of the eligible activities determination.

1.8.6. Recording and reporting

For this activity the following information must be recorded and reported—

- (a) for the installed product—
 - i. the brand name and type;
 - ii. the total material R-value of installed insulation products when measured in accordance with AS/NZS 4859;
 - iii. the total ceiling area in m² claimed as defined in section 1.8.5 of eligible activities determination;
 - iv. for electrical work, the number of the relevant certificate of electrical safety completed for the work in accordance with the Electricity Safety Act 1971; and
 - v. the type and certificate number of any other statutory certification for the work or associated work, if applicable; and
- (b) for this activity, these evidencing documents must be kept and produced upon request—
 - i. a pre-installation electrical safety report signed by a licensed electrician in accordance with the codes of practice and the approved electricity retailer's SWMS for this activity, stating that all items were checked and remediated when required;
 - ii. a copy of the relevant Certificate of Electrical Safety (CES) for any work completed in accordance with the Electricity Safety Act 1971. This must include details of specific work including, but not limited to—
 - (1) fixed unsafe wiring;

- (2) upgraded the lighting with LEDs;
 - (3) lifted up and securely clipped iron core transformers;
 - (4) re-rated the circuit and its cables; and
 - (5) installed a Residual Current Device (RCD);
- iii. a term of responsibility signed by the household occupant and, where different, the owner—
 - (1) agreeing not to climb into or allow access to their roof space after the licensed electrician has finished their work and before the insulation installation takes place; and
 - (2) confirming that they have been informed of the work done and safety issues addressed;
- iv. geotagged and time stamped photographic evidence—
 - (1) that the ceiling space prior to the activity was uninsulated or under insulated as defined in section 1.8.1 of eligible activities determination as in force at the time the activity was completed;
 - (2) of mains power being turned off, locked out and tagged for the duration of the installation;
 - (3) of a warning sign installed in the ceiling space;
 - (4) if external access was required to carry out the activity;
 - (5) that recessed luminaire barriers were present or installed for all non-IC rated luminaires covered with insulation;
 - (6) that all electrical and mechanical appliances, other than recessed luminaries, were provided with adequate clearance – if no such equipment was present provide a written statement to this effect; and
 - (7) of the ceiling space at activity completion;
- v. codemark certificate or a report issued by an Accredited Testing Laboratory that—
 - (1) demonstrates that the product fulfils specific requirements of AS/NZS 4859; and
 - (2) sets out the tests the product has been subjected to and the results of those tests and any other relevant information that has been relied upon to demonstrate it fulfils specific requirements of AS/NZS 4859;
- vi. if no downlights were present provide a signed statement to this effect;
- vii. suitable evidence that the requirements of the effective versions of AS 3999 (as applicable) were complied with;
- viii. if existing insulation has been removed, provide a description of the type of insulation removed, the reason for removal and evidence that it has been removed in accordance with requirements and recycled or responsibly disposed of, such as a recycling certificate or similar; and
- ix. evidence that the residential premises tenant or owner were present at the start and satisfied at the end of the insulation installation services provided under this activity.

1.9. Install underfloor insulation

1.9.1. Application of this section

This section applies to undertaking Activity 1.9 – installing new underfloor insulation – as defined in section 1.9 of the eligible activities determination—

In accordance with the prescribed minimum activity performance specifications, installing a new underfloor insulation product to the underside of a suspended timber floor of a room within a residential premises that sits immediately above a subfloor space that is either—

- (a) **Activity ID 1.9(a)** – Enclosed, that is, where the area of open ventilation in the subfloor walling to the underfloor space averages less than 25,000mm² per lineal metre of subfloor walling; or
- (b) **Activity ID 1.9(b)** – Un-enclosed, that is, where the area of open ventilation in the subfloor walling to the underfloor space averages 25,000mm² or more per lineal metre of subfloor walling.

Note 1 Ground floors do not include concrete floors or floors that separate habitable rooms.

Note 2 Attached garages, sheds or the like are ineligible.

1.9.2. Competency requirements

Activity 1.9 must be carried out by an authorised installer who might be either—

- (a) an **authorised electrician** with an unrestricted ACT electrician licence issued under the *Construction Occupations (Licensing) Act 2004*, who will undertake a pre-installation electrical safety check and issue an electrical safety report to advise on whether ceiling insulation installation can safely proceed;
- (b) an **authorised insulation installer**, who will carry out the installation of ceiling insulation; or
- (c) an **independent insulation installation auditor**, who will carry out onsite audits of ceiling insulation installations.

All parties involved in the undertaking of this activity must have completed all training prescribed in section A.4.

1.9.2.1. Competencies

Required general competencies include, but are not limited to—

- (a) identifying whether there is a standard flueless gas appliance or a gas connection that could be used for a flueless gas appliance.

1.9.2.1.1. Electrician competencies

The **authorised electrician** must be competent in—

- (a) carrying out an electrical safety check described in the minimum activity performance specifications and required remediation works in compliance with the ACT Electrical Safety Act, codes of practice and all relevant standards, such as AS/NZS 3000: *Electrical Installations*; and
- (b) providing suitable evidence, as determined by the administrator, that all electrical safety requirements have been achieved prior to the installation of insulation.

1.9.2.1.2. Insulation installer competencies

The **authorised insulation installer** must—

- (a) hold current Energy Efficiency Council (EEC) Certified Insulation Installer certification; and
- (b) be competent in—

- i. turning off the mains power at the customer meter board, testing for de-energisation of relevant circuits with a voltage detector, implementing lock out and tag and, once their work has finished, restoring power supply to fulfil the requirements of AS/NZS 3000: *Electrical Installations*;
- ii. interpreting and understanding the electrical safety report issued by the licensed electrician, such as identifying mains cables and running through the underfloor space, or other potential electrical safety hazards;
- iii. installing insulation in accordance with the installation instructions provided by the manufacturer; and
- iv. determining if there is enough clearance for installation of underfloor insulation in accordance with the current version of AS 3999.

1.9.2.1.3. Insulation installation auditor competencies

The **independent insulation installation auditor(s)** must—

(a) have undertaken the following units of competency within the last three years—

- i. CPCCOHS2001A Apply OHS requirements policies and procedures in the construction industry;
- ii. CPCCCM1015A Carry out Measurements and Calculations; and
- iii. CPCCPB3014A Install Batt Insulation Products;

Note Independent auditors do not need to meet the practical insulation installation requirements of the course or hold an EEC Certified Insulation Installer certification.

(b) be competent in—

- i. turning off the mains power at the customer meter board, testing for de-energisation of relevant circuits with a voltage detector, implementing lock out and tag and, once their work has finished, restoring power supply to fulfil the requirements of AS/NZS 3000: *Electrical Installations*; and
- ii. Interpreting and understanding the electrical safety report issued by the licensed electrician, such as identifying mains cables and running through the underfloor space, or other potential electrical safety hazards; and

(c) must have at least one year experience either being—

- i. a residential insulation auditor for either insulation companies or other insulation government programs;
- ii. an accredited insulation installer with a good safety record;
- iii. a building surveyor with experience auditing residential insulation upgrades or new build installation; or
- iv. a licensed electrician with experience undertaking electrical safety checks for insulation programs or insulation installations.

1.9.3. Determining eligibility of premises

A premises is an eligible residential premises for Activity ID 1.8 if—

(a) it is defined in the National Construction Code (The Building Code of Australia) as either—

- i. Building Class 1a(i); or
- ii. Building Class 1a(ii), if located on single allotments, i.e. if services associated with one title are not passing through different titles from end to end on the allotment;

- (b) it has uninsulated suspended timber floors located immediately above a subfloor space as defined in the eligible activities determination for Activity 1.9;
- (c) there are no flueless gas appliances or gas connections (Bayonet fittings) that could be used for flueless gas appliances in the premises; and

Note Any existing flueless gas appliance must be removed and the gas line permanently sealed prior to the undertaking of this activity. Costs for this work shall be borne entirely by the customer and must not be part of pass through costs generally attributed to the EEIS.

- (d) it is not listed as a Mr Fluffy house on <http://www.asbestostaskforce.act.gov.au/the-list/search-list>.

1.9.4. Minimum activity performance specifications

The minimum specifications for Activity 1.9 to be a compliant eligible activity are the minimum activity performance specifications in section 1.9.2 of the eligible activities determination and the provisions in this section of this code.

In addition—

- (a) the installed product must meet the installed product requirements section 1.9.3 of the eligible activities determination; and
- (b) the products must be installed in accordance with the manufacturer's instructions and any other relevant legislation and standards, including but not limited to, the requirements of the current versions of AS 3999 and AS/NZS 3000 (as applicable).

Note 1 In particular, the pre-installation electrical safety check, other safety and risk assessment procedures, electrical safety provisions and provisions for limiting moisture ingress of AS 3999 shall be observed.

Note 2 If there is an inconsistency between the manufacturer's instructions, the requirements of this code or relevant legislation and standards that apply to the activity, the most stringent requirement applies to the extent of the inconsistency.

1.9.4.1. Pre-installation electrical safety check

Prior to the installation of underfloor insulation, a pre-installation electrical safety check must be completed and signed by a licensed electrician in accordance with the codes of practice and the approved electricity retailer's SWMS for this activity. This must include, but is not limited to, ensuring that—

- (a) there is no unsafe wiring and that the wiring is rated correctly;
- (b) the installation of underfloor insulation will not lead to any electrical wiring or circuits being materially adversely affected or becoming non-compliant with AS/NZS 3000;
- (c) if electrical safety risks are found to be present, remediation works are performed to comply with the ACT Electrical Safety Act, all relevant standards such as AS/NZS 3000, and relevant sub-sections of the approved electricity retailer's SWMS prior to the installation of insulation; and
- (d) if the premises do not have a Residual Current Device (RCD) installed in the relevant circuit/s affected by the underfloor insulation installation, an RCD must be installed for that affected circuit/s prior to the installation of insulation.

Note 1 A copy of the electrical safety report issued by the licensed electrician must be provided to the insulation installer and independent auditor before work commences and a copy kept on site and easily accessible by all parties involved in undertaking this activity.

Note 2 Costs for any electrical remediation works shall be borne entirely by the customer and must not be part of pass through costs generally attributed to the EEIS.

Suitable evidence, as determined by the administrator, must be obtained stating that all electrical safety requirements have been achieved prior to the installation of underfloor insulation.

When installing insulation around or near electrical or mechanical appliances, the authorised installer must ensure that installation of insulation does not impede the safe operation of the equipment.

The undertaking of this activity shall not compromise the condensation management of the building. Reference should be made to the provisions in the Australian Building Codes Board publication, *Condensation in buildings – Information handbook*.

1.9.4.2. Pre-installation safety check

Prior to the installation of underfloor insulation, insulation installer(s) must undertake a safety check aligned with the approved electricity retailer's SWMS for this activity. As part of the safety check the insulation installer needs to pro-actively manage risks, which can include, but are not limited to—

- (a) interpreting and understanding the electrical safety report issued by the licensed electrician;
- (b) working in a poorly ventilated workspace in hot weather;
- (c) working in confined spaces;
- (d) materials handling, and exposure to hazardous materials including asbestos;
- (e) electrocution, by recording the source of electrical power to the home, and any related power equipment;
- (f) de-energising and isolating power at the mains;
- (g) testing for de-energisation by checking the lights and testing the cables and power points with a voltage detector;
- (h) implementing lock out and tag before installation; and
- (i) other OH&S risks by including appropriate workplace health and safety risk control measures as appropriate.

1.9.4.3. Other requirements

All waste material must be removed from the site.

The authorised installer must verify if the product is correctly installed in accordance with requirements.

Note Bonded asbestos products are found on many residential and commercial buildings. These materials can become friable with age and pose additional risks requiring management controls beyond the scope of this code. If friable asbestos is found, risk treatment steps described in section A.5.5 should be followed.

1.9.5. Calculation of energy savings factor

The energy savings factor must be calculated in accordance with section 1.9.5 of the eligible activities determination.

1.9.6. Recording and reporting

For this activity the following information must be recorded and reported—

- (a) for the installed product—
 - i. the brand name and type;
 - ii. the material R-value when measured in accordance with AS/NZS 4859;
 - iii. the total underfloor area in m2 claimed as defined in section 1.9.5 of the eligible activities determination;
 - iv. for electrical work, the number of the relevant certificate of electrical safety completed for the work in accordance with the Electricity Safety Act 1971; and
 - v. the type and certificate number of any other statutory certification for the work or associated work, if applicable;
- (b) for this activity, these evidencing documents must be kept and produced upon request—

- i. a pre-installation electrical safety report signed by a licensed electrician in accordance with the codes of practice and the approved electricity retailer's SWMS for this activity, stating that all items were checked and remediated when required;
- ii. a copy of the relevant Certificate of Electrical Safety (CES) for any work completed in accordance with the *Electricity Safety Act 1971*. This must include details of specific work including, but not limited to—
 - (1) fixed unsafe wiring;
 - (2) re-rated the circuit and its cables; and
 - (3) installed a Residual Current Device (RCD);
- iii. a term of responsibility signed by the household occupant and, where different, the owner—
 - (1) agreeing not to enter or allow access to their underfloor cavity after the licensed electrician has finished their work and before the insulation installation takes place; and
 - (2) confirming that have been informed of the work done and safety issues addressed;
- iv. geotagged and time stamped photographic evidence—
 - (1) of uninsulated suspended timber floors as defined in section 1.9.1 of the eligible activities determination as in force at the time the activity was completed;
 - (2) of mains power being turned off, locked out and tagged for the duration of the installation;
 - (3) that all electrical and mechanical appliances were provided with adequate clearance – if no such equipment was present provide a written statement to this effect; and
 - (4) of the underfloor space at activity completion;
- v. codemark certificate or a report issued by an Accredited Testing Laboratory that—
 - (1) demonstrates that the product fulfils specific requirements of AS/NZS 4859; and
 - (2) sets out the tests the product has been subjected to and the results of those tests and any other relevant information that has been relied upon to demonstrate it fulfils specific requirements of AS/NZS 4859;
- vi. suitable evidence that the requirements of the effective versions of AS 3999 (as applicable) were complied with; and
- vii. evidence that the residential premises tenant or owner were present at the start and satisfied at the end of the insulation installation services provided under this activity.

2. Space heating and cooling activities

2.1. Install a high efficiency central air conditioning heat pump

2.1.1. Application of this section

This section applies to undertaking Activity 2.1 – install a high efficiency central air conditioning heat pump (central heat pump) – as defined in section 2.1 of the eligible activities determination as—

In accordance with the prescribed minimum activity performance specifications, this activity involves the installation of high efficiency central air conditioning heat pump in a—

- (a) **Activity ID 2.1(a)** – Residential premises; or
- (b) **Activity ID 2.1(b)** – Business premises.

2.1.2. Competency requirements

Activity 2.1 must be carried out by an authorised installer(s) who has completed all required training as prescribed in section A.4.

An authorised installer(s) must be proficient in all relevant competencies required for undertaking the activity, including, but not limited to—

- (a) decommissioning an existing electric or gas heater, where required, in accordance with the *Gas Safety Act 2000* and AS 5601, and the *Electricity Safety Act 1971* and AS 3000;
- (b) installing, commissioning and testing a central heat pump in accordance with the *Electricity Safety Act 1971* and AS 3000;
- (c) installing, commissioning and testing insulated ductwork in accordance with the requirements for Activity 2.4 – Install insulated heating ductwork, where required;
- (d) explaining the use, operation and safety requirements of the installed product; and
- (e) understanding the decommissioning, recycling and disposal requirements for the activity.

2.1.3. Determining eligibility of premises

A premises is an eligible premises for Activity 2.1 if the premises is a residential or business premises as defined in the eligible activities determination.

2.1.4. Installed product requirements

The installed product must meet the installed product requirements of section 2.1.3 of the eligible activities determination.

2.1.5. Minimum activity performance specifications

The minimum specifications for Activity 2.1 to be a compliant eligible activity are the minimum activity performance specifications in section 2.1.2 of the eligible activities determination and the provisions in this section of the code.

In addition—

- (a) the installed product must be installed and commissioned in accordance with the *Electricity Safety Act 1971* and AS 3000;
- (b) where required, existing components of the installation are to be upgraded to meet current standards of the *Electricity Safety Act 1971* and AS 3000; and

- (c) refrigerants, where used, must be used in accordance with any relevant law and best practice guidelines, including but not limited to, the *Ozone Protection and Synthetic Greenhouse Gas Management Act 1989* (Commonwealth), *The Australian Refrigerant Handling Code of Practice 2007* and the *Australian Institute of Refrigeration, Air Conditioning and Heating Flammable Refrigerants Safety Guide*.

Note Refer to the *Australian Institute of Refrigeration, Air Conditioning and Heating Flammable Refrigerants Safety Guide* for further explanation on managing the health and safety risks associated with refrigeration equipment and systems that use a flammable refrigerant (http://www.airah.org.au/imis15_prod/Content_Files/TechnicalPublications/Flammable-Refrigerant-Safety-Guide-2013.pdf).

2.1.5.1. Testing

The installer must test all products after installation to verify the product is correctly installed in accordance with manufacturer's instructions.

For residential applications, the installer must ensure that noise levels do not exceed 35 decibels (dB) at each neighbour's boundary as required under the *Environment Protection Act 1997*.

Note Bonded asbestos products are found on many residential and commercial buildings. These materials can become friable with age and pose additional risks requiring management controls beyond the scope of this code. If friable asbestos is found, risk treatment steps described in section A5.5 should be followed.

2.1.6. Decommissioning, recycling and disposal

Any decommissioned existing heaters and related components, including thermostats, pipework, ductwork, flues, grilles, registers, vents, circuits and circuit tails must be removed from the premises if reasonable and/or rendered permanently sealed so as to prevent air leakage, in a manner approved by the administrator.

Note 1 For example, electric resistance heaters that are integrated into the building fabric such as in-slab or in-ceiling resistance heaters cannot be reasonably removed during the completion of this activity.

Note 2 All heaters must be decommissioned in accordance with the *Gas Safety Act 2000* and *AS 5601*, and the *Electricity Safety Act 1971* and *AS 3000*, where applicable.

Note 3 Any opening (including registers, vents, ductwork) left in floors, ceilings, walls (internal and external), and roofs resulting from the decommissioning of existing space heaters and related components, must be made good and/or permanently sealed to prevent the loss of conditioned air from conditioned spaces or the ingress of moisture.

Note 4 Costs of works for purely cosmetic purposes that are above and beyond the minimum requirements of the sealing and removal of redundant ducting, circuits and/or pipework shall be borne entirely by the customer and must not be part of pass through costs generally attributed to the EEIS.

If the replaced space heater contains refrigerated gases, refrigerants must be disposed of in accordance with any relevant law, including but not limited to *The Ozone Protection and Synthetic Greenhouse Gas Management Act 1989* (Commonwealth) and *The Australian Refrigerant Handling Code of Practice 2007*.

All decommissioned space heaters and components that have been removed from the premises must be recycled or disposed of in accordance with section A.3.14.

2.1.7. Calculation of energy savings factor

The energy savings factor must be calculated in accordance with section 2.1.5 of the eligible activities determination.

2.1.8. Recording and reporting

2.1.8.1. Record and report

For this activity the following information must be recorded and reported—

- (a) all required information in section 7.3 for periodic activity reporting and section 8.2 for compliance period reporting of the record keeping and reporting code of practice;

- (b) the brand name, model number and serial number of the installed product;
 - (c) for the installed product—
 - i. the Annual Coefficient of Performance (ACOP) at condition H1;
 - ii. the rated heating capacity at condition H1;
 - iii. whether the model is listed for cold climate heating at condition H2 (yes/no); and
 - iv. the type of new installation as listed on the register of products for the activity;
- Note For the GEMS database this must be the listed value for 'Configuration1' followed by the value for 'Configuration2', e.g. Ducted Single Split System or Non Ducted Multi Split System, etc.*
- (d) where an existing central heater is decommissioned as part of the activity, the type of system being removed, being electric panel, electric slab, electric ducted, gas ducted, other or none, and—
 - i. the floor area in m² the replaced heater provides heating to; and
 - ii. the model, brand and serial or product number of the product being decommissioned, where ascertainable;
 - (e) for multiple activity record forms, the authorised installer identifier of each installer that carried out the activity;
 - (f) where gas fitting work is undertaken, the notice number of the Notification and Certification of Compliance for Plumbing and Gas Work (Minor Works) in accordance with the *Gas Safety Act 2000*;
 - (g) for electrical work, the number of the relevant certificate of electrical safety completed for the work in accordance with the *Electricity Safety Act 1971*;
 - (h) the type and certificate number of any other statutory certification for the work or associated work, if applicable;
 - (i) the energy savings factor for the relevant activity calculated in accordance with the eligible activities determination as in force at the time the activity was completed; and
 - (j) if the activity is required to be undertaken together with Activity 2.4, the associated activity record form number for Activity 2.4 if recorded on a separate activity record form.

2.1.8.2. Evidence

For this activity the following evidencing documents must be kept and produced upon request—

- (a) geotagged and time stamped photographic evidence of—
 - i. the brand name, model number and serial number of the installed product;
 - ii. the brand name, model number and serial number of the removed product, where ascertainable; and
 - iii. the removal and/or draft sealing of remaining openings in accordance with section 2.1.6;
- (b) recycling or decommissioning evidence such as recycling certificates or similar;
- (c) evidence of the destruction of control/printed circuit boards (PCBs) or where no PCB is present, cutting of ignition system wires and/or thermocouple (or similar action to render the unit inoperable) such as geotagged and time stamped photographs;
- (d) where gas fitting work is undertaken, a copy of the relevant Notification and Certification of Compliance for Plumbing and Gas Work (Minor Works) in accordance with the *Gas Safety Act 2000*;
- (e) where electrical work is undertaken, a copy of the relevant Certificate of Electrical Safety completed for the work in accordance with the *Electricity Safety Act 1971*; and
- (f) a copy of any other statutory certification for the work or associated work, if applicable.

Note Activity 2.1 must be undertaken together with Activity 2.4 for the insulation of ductwork, where any existing ductwork connected to the heater does not meet the installed product requirements in section 2.4.3 of the eligible activities determination.

2.2. Replace a ducted gas heater with high efficiency ducted gas heater (*Revoked*)

2.3. Install a high efficiency room air conditioning heat pump

2.3.1. Application of this section

This part applies to undertaking Activity 2.3 – install a high efficiency room air conditioning heat pump (room heat pump) – as defined in section 2.3 of the eligible activities determination as—

In accordance with the prescribed minimum activity performance specifications, this activity involves the installation of high efficiency central air conditioning heat pump in a—

- (a) **Activity ID 2.3(a)** – Residential premises; or
- (b) **Activity ID 2.3(b)** – Business premises.

2.3.2. Competency requirements

Activity 2.3 must be carried out by an authorised installer(s) who has completed all required training and licensing prescribed in section A.4.

An authorised installer/installers must be proficient in all relevant competencies required for undertaking the activity including, but not limited to—

- (a) decommissioning an existing electric or gas heater, where required, in accordance with the *Gas Safety Act 2000* and AS 5601, and the *Electricity Safety Act 1971* and AS 3000;
- (b) installing, commissioning and testing a room heat pump in accordance with the *Electricity Safety Act 1971* and AS 3000;
- (c) explaining the use, operation and safety requirements of an installed product; and
- (d) understanding the decommissioning, recycling and disposal requirements for the activity.

2.3.3. Determining eligibility of premises

A premises is eligible for Activity 2.3 if it is a residential or business premises as defined in the eligible activities determination.

2.3.4. Installed product requirements

The installed product must meet the installed product requirements of section 2.3.3 of the eligible activities determination.

2.3.5. Minimum activity performance specifications

The minimum specifications for Activity 2.3 to be a compliant eligible activity are the minimum activity performance specifications in section 2.3.2 of the eligible activities determination and the provisions in this section of the code.

In addition—

- (a) the installed product must be installed and commissioned in accordance with the *Electricity Safety Act 1971* and AS 3000;
- (b) where required, existing components of the installation are to be upgraded to meet current standards of the *Electricity Safety Act 1971* and AS 3000; and
- (c) refrigerants, where used, must be used in accordance with any relevant law and best practice guidelines, including but not limited to the *Ozone Protection and Synthetic Greenhouse Gas Management Act 1989* (Commonwealth), *The Australian Refrigerant Handling Code of Practice 2007* and the *Australian Institute of Refrigeration, Air Conditioning and Heating Flammable Refrigerants Safety Guide*.

Note Refer to the *Australian Institute of Refrigeration, Air Conditioning and Heating Flammable Refrigerants Safety Guide* for further explanation on managing the health and safety risks associated with refrigeration equipment and systems that use a flammable refrigerant

http://www.airah.org.au/imis15_prod/Content_Files/TechnicalPublications/Flammable-Refrigerant-Safety-Guide-2013.pdf.

2.3.5.1. Testing

The installer must test all products after installation to verify the product is correctly installed in accordance with manufacturer's instructions.

For residential applications, the installer must ensure that noise levels do not exceed 35 decibels (dB) at each neighbour's boundary as required under the *Environment Protection Act 1997*.

Note Bonded asbestos products are found on many residential and commercial buildings. These materials can become friable with age and pose additional risks requiring management controls beyond the scope of this code. If friable asbestos is found, risk treatment steps described in section A5.5 should be followed.

2.3.6. Decommissioning, recycling and disposal

Any decommissioned existing heaters and related components, including thermostats, pipework, ductwork, flues, grilles, registers, vents, circuits and circuit tails must be removed from the premises, if reasonable and/or rendered permanently sealed so as to prevent air leakage, in a manner approved by the administrator.

Note 1 For example, electric resistance heaters that are integrated into the building fabric such as in-slab or in-ceiling resistance heaters cannot be reasonably removed during the completion of this activity.

Note 2 All heaters must be decommissioned in accordance with the Gas Safety Act 2000 and AS 5601, and the Electricity Safety Act 1971 and AS 3000, where applicable.

Note 3 Any opening (including registers, vents, ductwork) left in floors, ceilings, walls (internal and external), and roofs resulting from the decommissioning of existing space heaters and related components, must be made good and/or permanently sealed to prevent the loss of conditioned air from conditioned spaces or the ingress of moisture.

Note 4 Costs of works for purely cosmetic purposes that are above and beyond the minimum requirements of the sealing and removal of redundant ducting, circuits and/or pipework shall be borne entirely by the customer and must not be part of pass through costs generally attributed to the EEIS.

If the replaced space heater contains refrigerated gases, refrigerants must be disposed of in accordance with any relevant law, including but not limited to, *The Ozone Protection and Synthetic Greenhouse Gas Management Act 1989 (Commonwealth)* and *The Australian Refrigerant Handling Code of Practice 2007*.

All decommissioned room heaters and components that have been removed from the premises must be recycled or disposed of in accordance with section A.3.14.

2.3.7. Calculation of energy savings factor

The energy savings factor must be calculated in accordance with section 2.3.5 of the eligible activities determination.

2.3.8. Recording and reporting

2.3.8.1. Record and report

For this activity the following information must be recorded and reported—

- (a) all required information in section 7.3 for periodic activity reporting and section 8.2 for compliance period reporting of the record keeping and reporting code of practice;
- (b) the brand name, model number and serial number of the installed product;
- (c) for the installed product, the following information—
 - i. the Annual Coefficient of Performance (ACOP) at condition H1;
 - ii. the rated heating capacity at condition H1;
 - iii. whether the model is listed for cold climate heating at condition H2 (yes/no); and

- iv. the type of new installation as listed on the register of products for the activity;

Note For the GEMS database this must be the listed value for 'Configuration1' followed by the value for 'Configuration2', e.g. Ducted Single Split System or Non Ducted Multi Split System, etc.

- (d) where an existing room heater is decommissioned as part of the activity, the type of system being removed, being electric resistance, flued gas or none, and—
 - i. the floor area in m² the replaced heater provides heating to; and
 - ii. the model, brand and serial or product number of the product being decommissioned, where ascertainable;
- (e) for multiple activity record forms, the authorised installer identifier of each installer that carried out the activity;
- (f) where gas fitting work is undertaken, the notice number of the Notification and Certification of Compliance for Plumbing and Gas Work (Minor Works) in accordance with the *Gas Safety Act 2000*;
- (g) for electrical work, the number of the relevant certificate of electrical safety completed for the work in accordance with the *Electricity Safety Act 1971*;
- (h) the type and certificate number of any other statutory certification for the work or associated work, if applicable; and
- (i) the energy savings factor for the relevant activity calculated in accordance the eligible activities determination as in force at the time the activity was completed.

2.3.8.2. Evidence

For this activity the following evidencing documents must be kept and produced upon request—

- (a) geotagged and time stamped photographic evidence of—
 - i. the brand name, model number and serial number of the installed product;
 - ii. the brand name, model number and serial number of the removed product, where ascertainable; and
 - iii. the removal and/or draft sealing of remaining openings in accordance with section 2.3.6;
- (b) recycling or decommissioning evidence such as recycling certificates or similar;
- (c) evidence of the destruction of control/printed circuit boards (PCBs) or where no PCB is present, cutting of ignition system wires and/or thermocouple (or similar action to render the unit inoperable) such as geotagged and time stamped photographs;
- (d) where gas fitting work is undertaken, a copy of the relevant Notification and Certification of Compliance for Plumbing and Gas Work (Minor Works) in accordance with the *Gas Safety Act 2000*;
- (e) where electrical work is undertaken, a copy of the relevant Certificate of Electrical Safety completed for the work in accordance with the *Electricity Safety Act 1971*; and
- (f) a copy of any other statutory certification for the work or associated work, if applicable.

2.4. Install insulated space conditioning ductwork

2.4.1. Application of this section

This section applies to undertaking Activity 2.4 – install insulated space conditioning ductwork – as defined in section 2.4 of the eligible activities determination as—

Activity ID 2.4 – In accordance with the prescribed minimum activity performance specifications, installing insulated space conditioning ductwork.

Note Space conditioning ductwork is ductwork for air-handling systems in buildings as defined in AS 4254 Ductwork for air-handling systems in buildings.

2.4.2. Competency requirements

2.4.2.1. Installer competency requirements

Activity 2.4 must be carried out by an authorised installer(s) who—

- (a) has completed CPCPMS3035A *Install and test ducting systems* or a preceding unit of competency named *Install and test ducting systems*, or can demonstrate competency in the installation and testing of ducting systems consistent with the essential outcomes of unit of competency CPCPMS3035A *Install and test ducting systems* using a method approved by the administrator;

Note The retailer should submit their methodology for determining the competency of installers carrying out this activity to the administrator for approval before sending installers to the administrator for the training prescribed in section A.4.

- (b) has completed RIIWHS202D *Enter and work in confined spaces* within the last three years, or has completed RIIWHS202D *Enter and work in confined spaces* or an equivalent preceding unit of competency and obtain a Certificate of Attendance for an “Enter and work in confined spaces” refresher course within the last three years;
- (c) has completed RIIWHS204D *Work safely at heights* within the last three years, or has completed RIIWHS204D *Work safely at heights* or an equivalent preceding unit of competency and obtain a Certificate of Attendance for a “Work safely at heights” refresher course within the last three years;
- (d) is the holder of a General Construction Induction card;
- (e) has completed all required training prescribed in section A.4; and
- (f) is an authorised installer for Activity 2.4.

Note 1 The retailer must retain records of training and/or determinations of competency for all authorised installers undertaking this activity. These records must be made available to the administrator on request.

Note 2 If electric dampers at 230V AC for zoning ducting have been or are to be installed, a licensed electrician under the Construction Occupations (Licensing) Act 2004 will be required to complete this activity. If electric dampers at 24V AC are used, the installer does not need to have an electrician's licence.

2.4.2.2. Other installer competencies

An authorised installer must be proficient in all relevant competencies required for undertaking the activity including, but not limited to—

- (a) installing, commissioning and testing insulated ductwork in accordance with the requirements for Activity 2.4;
- (b) explaining the use, operation and safety requirements of an installed product; and
- (c) understanding the decommissioning, recycling and disposal requirements for the activity.

2.4.3. Determining eligibility of premises

A premises is an eligible premises for Activity 2.4 if the premises is a residential or business premises as defined in the eligible activities determination.

2.4.4. Minimum activity performance specifications

The minimum specifications for Activity 2.4 to be a compliant eligible activity are the minimum activity performance specifications in section 2.4.2 of the eligible activities determination and the provisions in this section of the code.

The installed product must meet the installed product requirements in section 2.4.3 of the eligible activities determination and have a minimum product warranty of two years.

The installer must ensure that installed ductwork meets the requirements for Activity 2.4.

The installer must test all products after installation to verify the product is correctly installed in accordance with manufacturer's instructions.

Note Bonded asbestos products are found on many residential and commercial buildings. These materials can become friable with age and pose additional risks requiring management controls beyond the scope of this code. If friable asbestos is found, risk treatment steps described in section A5.5 should be followed.

2.4.5. Decommissioning, recycling and disposal

Any decommissioned ducting and related components must be removed from the premises, if reasonable.

All decommissioned space heaters and components that have been removed from the premises must be recycled or disposed of in accordance with section A.3.14.

2.4.6. Calculation of energy savings factor

The energy savings factor must be calculated in accordance with section 2.4.5 of the eligible activities determination.

Note The energy savings factor is based on rated output heating capacity and star rating as provided in table 16 of the eligible activities determination.

2.4.7. Recording and reporting

For this activity the following information must be recorded—

- (a) all required information in section 7.3 for periodic activity reporting and section 8.2 for compliance period reporting of the record keeping and reporting code of practice;
- (b) the Activity ID;
- (c) for each installed product, including fittings—
 - i. the brand name and model number; and
 - ii. the product R-value type when measured in accordance with AS/NZS 4859;
- (d) where section 2.4.3(f) of the eligible activities determination are applied, additional photographic evidence is collected showing that the existing ductwork is inaccessible, is within a conditioned zone and that the sealing of any vertical shaft has been completed;
- (e) for multiple activity record forms, the authorised installer identifier of each installer that carried out the activity;
- (f) the type and certificate number of any statutory certification for the work or associated work, if applicable;
- (g) the licence or registration number (however described), if applicable, of each person who provided a statutory certification; and

- (h) the energy savings factor for the activity calculated in accordance with section 2.4.5 of the eligible activities determination as in force at the time the activity was completed.

2.5. Replace separate central heating and cooling systems with a high efficiency central air conditioning heat pump

2.5.1. Application of this section

This section applies to undertaking Activity 2.5 – replace separate central heating and cooling systems with a high efficiency central air conditioning heat pump – as defined in section 2.5 of the eligible activities determination as—

In accordance with the prescribed minimum activity performance specifications, this activity involves the replacement of separate central heating and cooling systems with a high efficiency central heat pump system/s in a—

- (a) **Activity ID 2.5(a)** – Not active; or
- (b) **Activity ID 2.5(b)** – Business premises.

2.5.2. Competency requirements

Activity 2.5 must be carried out by an authorised installer(s) who has completed all required training and licensing prescribed in section A.4.

An authorised installer(s) must be proficient in all relevant competencies required for undertaking the activity including, but not limited to—

- (a) decommissioning an existing electric or gas heater, where required, in accordance with the *Gas Safety Act 2000* and AS 5601, and the *Electricity Safety Act 1971* and AS 3000;
- (b) installing, commissioning and testing a central heat pump system in accordance with the *Electricity Safety Act 1971* and AS/NZS 3000;
- (c) installing, commissioning and testing insulated ductwork in accordance with the requirements for Activity 2.4 – install insulated heating ductwork, where required;
- (d) explaining the use, operation and safety requirements of the installed product; and
- (e) understanding the decommissioning, recycling and disposal requirements for the activity.

2.5.3. Determining eligibility of premises

A premises is an eligible premises for Activity 2.5 if the premises is a business premises that includes a pre-existing heater and cooler as defined in the eligible activities determination.

2.5.4. Installed product requirements

The installed product must meet the installed product requirements in section 2.5.3 of the eligible activities determination.

2.5.5. Minimum activity performance specifications

The minimum specifications for Activity 2.5 to be a compliant eligible activity are the minimum activity performance specifications in section 2.5.2 of the eligible activities determination and the provisions in this section of the code.

In addition—

- (a) the installed products must be installed and commissioned in accordance with the *Electricity Safety Act 1971* and AS/NZS 3000;
- (b) where required, existing components of the installation are to be upgraded to meet current standards of the *Electricity Safety Act 1971* and AS/NZS 3000; and

- (c) refrigerants, where used, must be used in accordance with any relevant law and best practice guidelines, including but not limited to, the *Ozone Protection and Synthetic Greenhouse Gas Management Act 1989* (Commonwealth), *The Australian Refrigerant Handling Code of Practice 2007* and the *Australian Institute of Refrigeration, Air Conditioning and Heating Flammable Refrigerants Safety Guide*.

Note Refer to the Australian Institute of Refrigeration, Air Conditioning and Heating Flammable Refrigerants Safety Guide for further explanation on managing the health and safety risks associated with refrigeration equipment and systems that use a flammable refrigerant (http://www.airah.org.au/imis15_prod/Content_Files/TechnicalPublications/Flammable-Refrigerant-Safety-Guide-2013.pdf).

2.5.5.1. Testing

The installer must test all products after installation to verify the product is correctly installed in accordance with manufacturer's instructions.

Note Bonded asbestos products are found on many residential and commercial buildings. These materials can become friable with age and pose additional risks requiring management controls beyond the scope of this code. If friable asbestos is found, risk treatment steps described in section A5.5 should be followed.

2.5.6. Decommissioning, recycling and disposal

Any decommissioned existing space heaters and related components, including thermostats, pipework, ductwork, flues, grilles, registers, vents, circuits and circuit tails must be removed from the premises or otherwise rendered permanently sealed so as to prevent air leakage in a manner approved by the administrator.

Note 1 For example, electric resistance heaters that are integrated into the building fabric such as in-slab or in-ceiling resistance heaters cannot be reasonably removed during the completion of this activity.

Note 2 All heaters must be decommissioned in accordance with the Gas Safety Act 2000 and AS 5601, and the Electricity Safety Act 1971 and AS/NZS 3000, where applicable.

Note 3 Any opening (including registers, vents, ductwork) left in floors, ceilings, walls (internal and external), and roofs resulting from the decommissioning of existing space heaters and related components, must be made good or permanently and neatly sealed to prevent the loss of conditioned air from conditioned spaces or the ingress of moisture. The method for making good or sealing, its associated cost and appearance is to be agreed with the property owner prior to decommissioning.

Note 4 Costs of works for purely cosmetic purposes that are above and beyond the minimum requirements of the sealing and removal of redundant ducting, circuits and/or pipework shall be borne entirely by the customer and must not be part of pass through costs generally attributed to the EEIS.

If the replaced space heater or cooler contains refrigerated gases, refrigerants must be disposed of in accordance with any relevant law, including but not limited to, *The Ozone Protection and Synthetic Greenhouse Gas Management Act 1989* (Commonwealth) and *The Australian Refrigerant Handling Code of Practice 2007*.

All decommissioned heaters and coolers and associated components that have been removed from the premises must be recycled or disposed of in accordance with section A.3.14.

2.5.7. Calculation of energy savings factor

The energy savings factor must be calculated in accordance with section 2.5.5 of the eligible activities determination.

2.5.8. Recording and reporting

2.5.8.1. Record and report

For this activity the following information must be recorded and reported—

- (a) all required information in section 7.3 for periodic activity reporting and section 8.2 for compliance period reporting of the record keeping and reporting code of practice;
- (b) the brand name, model number and serial number of the installed product;
- (c) for the installed product—

- i. the Annual Coefficient of Performance (ACOP) at condition H1;
- ii. the rated heating capacity at condition H1;
- iii. whether the model is listed for cold climate heating at condition H2 (yes/no); and
- iv. the type of new installation as listed on the register of products for the activity;

Note For the GEMS database this must be the listed value for 'Configuration1' followed by the value for 'Configuration2', e.g. Ducted Single Split System or Non Ducted Multi Split System, etc.

- (d) for the existing central heater and cooler that is decommissioned—
 - i. the type of heating system being removed, being electric slab, electric ducted, electric panel or gas ducted and the type of electric cooler;
 - ii. the floor area in m² the replaced heater provides heating to and the floor area in m² the replaced cooler provides cooling to; and
 - iii. the model, brand and serial number or product number of the products being decommissioned, where ascertainable;
- (e) for multiple activity record forms, the authorised installer identifier of each installer that carried out the activity;
- (f) where gas fitting work is undertaken, the notice number of the Notification and Certification of Compliance for Plumbing and Gas Work (Minor Works) in accordance with the *Gas Safety Act 2000*;
- (g) for electrical work, the number of the relevant certificate of electrical safety completed for the work in accordance with the *Electricity Safety Act 1971*;
- (h) the type and certificate number of any other statutory certification for the work or associated work, if applicable;
- (i) the energy savings factor for the activity calculated in accordance with section 2.5.5 of the eligible activities determination as in force at the time the activity was completed; and
- (j) if the activity is required to be undertaken together with Activity 2.4, the associated activity record form number for Activity 2.4 if recorded on a separate activity record form.

2.5.8.2. Evidence

For this activity the following evidencing documents must be kept and produced upon request—

- (a) geotagged and time stamped photographic evidence of—
 - i. the brand name, model number and serial number of the installed product;
 - ii. the brand name, model number and serial number of the removed products, where ascertainable; and
 - iii. the removal and/or draught sealing of remaining openings in accordance with the requirements of this section;
- (b) recycling or decommissioning evidence such as recycling certificate or similar;
- (c) evidence of the destruction of control/printed circuit boards (PCBs) or where no PCB is present, cutting of ignition system wires and thermocouple (or similar action which will render the unit inoperable) such as geotagged and time stamped photographs;
- (d) where gas fitting work is undertaken, a copy of the relevant Notification and Certification of Compliance for Plumbing and Gas Work (Minor Works) in accordance with the *Gas Safety Act 2000*;
- (e) where electrical work is undertaken, a copy of the relevant Certificate of Electrical Safety completed for the work in accordance with the *Electricity Safety Act 1971*; and
- (f) a copy of any other statutory certification for the work or associated work, if applicable.

Note Activity 2.5 must be undertaken together with Activity 2.4 for the insulation of ductwork, where any existing ductwork connected to the heater or cooler does not meet the installed product requirements in section 2.4.3 of the eligible activities determination.

2.6. Replace separate room heating and cooling systems with a high efficiency room heat pump

2.6.1. Application of this section

This section applies to undertaking Activity 2.6 – replace separate room heating and cooling systems with a high efficiency room heat pump – as defined in section 2.6 of the eligible activities determination as—

In accordance with the prescribed minimum activity performance specifications, this activity involves the replacement of separate room heating and cooling systems with a high efficiency room heat pump system in a—

- (a) **Activity ID 2.6(a)** – Not active; or
- (b) **Activity ID 2.6(b)** – Business premises.

2.6.2. Competency requirements

Activity 2.6 must be carried out by an authorised installer(s) who has completed all required training and licensing prescribed in section A.4.

An authorised installer(s) must be proficient in all relevant competencies required for undertaking the activity including, but not limited to—

- (a) decommissioning an existing electric or gas heater, where required, in accordance with the *Gas Safety Act 2000* and AS 5601, and the *Electricity Safety Act 1971* and AS/NZS 3000;
- (b) installing, commissioning and testing a room heat pump in accordance with the *Electricity Safety Act 1971* and AS/NZS 3000;
- (c) explaining the use, operation and safety requirements of an installed product; and
- (d) understanding the decommissioning, recycling and disposal requirements for the activity.

2.6.3. Determining eligibility of premises

A premises is eligible for Activity 2.6 if it is a business premises as defined in the eligible activities determination.

2.6.4. Installed product requirements

The installed product must meet the installed product requirements in section 2.6.3 of the eligible activities determination.

2.6.5. Minimum activity performance specifications

The minimum specifications for Activity 2.6 to be a compliant eligible activity are the minimum activity performance specifications in section 2.6.2 of the eligible activities determination and the provisions in this section of the code.

In addition—

- (a) the electric room heater/cooler must be installed and commissioned in accordance with the *Electricity Safety Act 1971* and AS/NZS 3000;
- (b) where required, existing components of the installation are to be upgraded to meet current standards of the *Electricity Safety Act 1971* and AS/NZS 3000; and
- (c) refrigerants, where used, must be used in accordance with any relevant law, including but not limited to, the *Ozone Protection and Synthetic Greenhouse Gas Management Act 1989* (Commonwealth) and *The Australian Refrigerant Handling Code of Practice 2007*.

Note Refer to the Australian Institute of Refrigeration, Air Conditioning and Heating Flammable Refrigerants Safety Guide for further explanation on managing the health and safety risks associated with refrigeration equipment and systems that use a flammable refrigerant (http://www.airah.org.au/imis15_prod/Content_Files/TechnicalPublications/Flammable-Refrigerant-Safety-Guide-2013.pdf).

2.6.5.1. Testing

The installer must test all products after installation to verify the product is correctly installed in accordance with manufacturer's instructions.

Note Bonded asbestos products are found on many residential and commercial buildings. These materials can become friable with age and pose additional risks requiring management controls beyond the scope of this code. If friable asbestos is found, risk treatment steps described in section A5.5 should be followed.

2.6.6. Decommissioning, recycling and disposal

Any decommissioned existing heaters and related components, including thermostats, pipework, ductwork, flues, grilles, registers, vents, circuits and circuit tails must be removed from the premises, if reasonable and/or rendered permanently sealed so as to prevent air leakage, in a manner approved by the administrator.

Note 1 For example, electric resistance heaters that are integrated into the building fabric such as in-slab or in-ceiling resistance heaters cannot be reasonably removed during the completion of this activity.

Note 2 All heaters must be decommissioned in accordance with the Gas Safety Act 2000 and AS 5601, and the Electricity Safety Act 1971 and AS/NZS 3000, where applicable.

Note 3 Any opening (including registers, vents, ductwork) left in floors, ceilings, walls (internal and external), and roofs resulting from the decommissioning of existing space heaters and related components, must be made good and/or permanently sealed to prevent the loss of conditioned air from conditioned spaces or the ingress of moisture.

Note 4 Costs of works for purely cosmetic purposes that are above and beyond the minimum requirements of the sealing and removal of redundant ducting, circuits and/or pipework shall be borne entirely by the customer and must not be part of pass through costs generally attributed to the EEIS.

If the replaced space heater or cooler contains refrigerated gases, refrigerants must be disposed of in accordance with any relevant law, including but not limited to, *The Ozone Protection and Synthetic Greenhouse Gas Management Act 1989* (Commonwealth) and *The Australian Refrigerant Handling Code of Practice 2007*.

All decommissioned heaters and coolers and associated components that have been removed from the premises must be recycled or disposed of in accordance with section A.3.14.

2.6.7. Calculation of energy savings factor

The energy savings factor must be calculated in accordance with section 2.6.5 of the eligible activities determination.

2.6.8. Recording and reporting

2.6.8.1. Record and report

For this activity the following information must be recorded and reported—

- (a) all required information in section 7.3 for periodic activity reporting and section 8.2 for compliance period reporting of the record keeping and reporting code of practice;
- (b) the brand name, model number and serial number of the installed product;
- (c) for the installed product, the following information—
 - i. the Annual Coefficient of Performance (ACOP) at condition H1;
 - ii. the rated heating capacity at condition H1;
 - iii. whether the model is listed for cold climate heating at condition H2 (yes/no); and
 - iv. the type of new installation as listed on the register of products for the activity;

Note For the GEMS database this must be the listed value for 'Configuration1' followed by the value for 'Configuration2', e.g. Ducted Single Split System or Non Ducted Multi Split System, etc.

- (d) for the existing central heater and cooler that is decommissioned as part of the activity, record the following information—
 - i. the type of systems being removed, being one of fixed electric resistance heater or fixed gas flued heater and type of fixed electric cooler;
 - ii. the floor area in m² the replaced heater provides heating to and the floor area in m² the replaced cooler provides cooling to; and
 - iii. the model, brand and serial number or product number of the products being decommissioned, where ascertainable;
- (e) for multiple activity record forms, the authorised installer identifier of each installer that carried out the activity;
- (f) where gas fitting work is undertaken, the notice number of the Notification and Certification of Compliance for Plumbing and Gas Work (Minor Works) in accordance with the *Gas Safety Act 2000*;
- (g) for electrical work, the number of the relevant certificate of electrical safety completed for the work in accordance with the *Electricity Safety Act 1971*;
- (h) the type and certificate number of any other statutory certification for the work or associated work, if applicable;
- (i) the energy savings factor for the activity calculated in accordance with section 2.6.5 of the eligible activities determination as in force at the time the activity was completed; and
- (j) the date of completion, being the date all prescribed activity requirements are completed.

2.6.8.2. Evidence

For this activity the following evidencing documents must be kept and produced upon request—

- (a) geotagged and time stamped photographic evidence of—
 - i. the brand name, model number and serial number of the installed product;
 - ii. the brand name, model number and serial number of the removed products, where ascertainable; and
 - iii. the removal and/or draft sealing of remaining openings in accordance with section A.3.14;
- (b) recycling or decommissioning evidence such as recycling certificates or similar;
- (c) evidence of the destruction of control/printed circuit boards (PCBs) or where no PCB is present, cutting of ignition system wires and/or thermocouple (or similar action to render the unit inoperable) such as geotagged and time stamped photographs;
- (d) where gas fitting work is undertaken, a copy of the relevant Notification and Certification of Compliance for Plumbing and Gas Work (Minor Works) in accordance with the *Gas Safety Act 2000*;
- (e) where electrical work is undertaken, a copy of the relevant Certificate of Electrical Safety completed for the work in accordance with the *Electricity Safety Act 1971*; and
- (f) a copy of any other statutory certification for the work or associated work, if applicable.

3. Hot water service activities

3.1. Decommission an electric resistance water heater and install a specified high efficiency water heater

3.1.1. Application of this section

This section applies to undertaking Activity 3.1 – decommission an electric resistance water heater and install a specified high efficiency water heater – as defined in section 3.1 of the eligible activities determination as—

Activity ID 3.1 – In accordance with the prescribed minimum activity performance specifications, decommissioning an electric resistance water heater in a hot water system servicing sanitary fixtures and appliances and installing a specified high efficiency water heater.

3.1.2. Competency requirements

3.1.2.1. Installer competency requirements

Activity 3.1 must be carried out by an authorised installer(s)—

- (a) where electrical wiring is involved, the installation is undertaken by a person who is the holder of an unrestricted electrician licence issued under the *Construction Occupations (Licensing) Act 2004*;
- (b) where plumbing work is involved, the installation is undertaken by a person who is the holder of a plumbing licence that is issued under the *Construction Occupations (Licensing) Act 2004*;
- (c) if the installed product is a solar water heater, a person who has completed and obtained a Statement of Attainment for 80911ACT *Course in installing solar heated water systems* or an equivalent course;
- (d) where refrigerant gases are required to be installed and/or recovered, the person is a licensed technician for the handling of refrigerant gases with the Australian Refrigeration Council (Licence Type: RAC01);
- (e) who is the holder of a General Construction Induction card; and
- (f) who has completed all required training prescribed in section A.4.

Note The retailer must retain records of training and/or determinations of competency for all authorised installers undertaking this activity. These records must be made available to the administrator on request.

3.1.2.2. Other installer competencies

An authorised installer(s) must be proficient in all relevant competencies required for undertaking the activity including, but not limited to—

- (a) decommissioning an existing electric resistance water heater in accordance with the *Water and Sewerage Act 2000* and Plumbing Code of Australia, and the *Electricity Safety Act 1971* and AS/NZS 3000;
- (b) installing, commissioning and testing an electric water heater in accordance with the *Water and Sewerage Act 2000* and Plumbing Code of Australia, and the *Electricity Safety Act 1971* and AS/NZS 3000;
- (c) determining whether existing shower fittings meet the installed product requirements of Activity 3.3;
- (d) explaining the use, operation and any safety requirements of an installed product; and
- (e) understanding the decommissioning, recycling and disposal requirements for the activity.

3.1.3. Determining eligibility of premises

A premises is an eligible premises for Activity 3.1 provided that—

- (a) the premises is a residential or a business premises as defined in the eligible activities determination;
- (b) the premises has an existing electric resistance water heater;
- (c) if the installed product is a solar water heater—
 - i. the roof structure is suitable for supporting the solar water heater and any components of the solar water heater;
- Note* If the authorised installer is unable to verify the adequacy of the roof structure in supporting the solar water heater or any components of the solar water heater a structural engineer must be consulted prior to starting the installation.
- ii. the roof structure does not contain asbestos; and
- Note* Bonded asbestos products are found on many residential and commercial buildings. These materials can become friable with age and pose additional risks requiring management controls beyond the scope of this code. If friable asbestos is found, risk treatment steps described in section A5.5 should be followed.
- iii. the roof structure allows the solar water heater solar collectors to be orientated within plus or minus 45 degrees from north with an inclination of between 15 and 45 degrees from horizontal;
- (d) only solar water heaters fitted to class 1 or class 10a buildings are exempt from needing building approval. Exempt building and building work is provided in the *Building (General) Regulation 2008* accessed at <http://www.legislation.act.gov.au/sl/2008-3/current/pdf/2008-3.pdf>; and
- (e) if the installed product is a solar water heater—
 - i. it can be installed in accordance with the requirements for exemption from development approval in the *Planning and Development Act 2007*; or
 - ii. the lessee has obtained development approval for the proposed solar water heater installation.

Note Section 1.27 of Schedule 1, Part 1.3, Division 1.3.1 of the Planning and Development Regulation 2008 provides the requirements for solar water heaters to be exempt from requiring development approval. These can be accessed at <http://www.legislation.act.gov.au/sl/2008-2/current/pdf/2008-2.pdf>.

3.1.4. Installed product requirements

The installed product must meet the installed product requirements in section 3.1.3 of the eligible activities determination.

If the installed product is a solar water heater, it must be suitable for use in areas that experience frost conditions.

The installed product must have a minimum product warranty of two years.

3.1.5. Minimum activity performance specifications

The minimum specifications for Activity 3.1 to be a compliant eligible activity are the minimum activity performance specifications in section 3.1.2 of the eligible activities determination and the provisions in this section of the code.

In addition—

- (a) the installed product must be installed in accordance with the *Water and Sewerage Act 2000*, Plumbing Code of Australia and *Electricity Safety Act 1971* and AS/NZS 3000;
- (b) where required, existing components of the installation are to be upgraded to meet current standards of the *Water and Sewerage Act 2000* and Plumbing Code of Australia and, *Electricity Safety Act 1971* and AS/NZS 3000; and

- (c) refrigerants, where used, must be used in accordance with any relevant law, including but not limited to, the *Ozone Protection and Synthetic Greenhouse Gas Management Act 1989* (Commonwealth) and *The Australian Refrigerant Handling Code of Practice 2007*.

Note Refer to the Australian Institute of Refrigeration, Air Conditioning and Heating *Flammable Refrigerants Safety Guide* for further explanation on managing the health and safety risks associated with refrigeration equipment and systems that use a flammable refrigerant (http://www.airah.org.au/imis15_prod/Content_Files/TechnicalPublications/Flammable-Refrigerant-Safety-Guide-2013.pdf).

3.1.5.1. Testing

The installer must test all products after installation to verify the product is correctly installed in accordance with manufacturer's instructions.

The installer must ensure that noise levels do not exceed 35 decibels (dB) at each neighbour's boundary as required under the *Environment Protection Act 1997*.

3.1.6. Decommissioning, recycling and disposal

Any decommissioned existing water heater and related components, including pipework, circuits and circuit tails, must be removed from the premises, if reasonable.

If the replaced space heater contains refrigerated gases, refrigerants must be disposed of in accordance with any relevant law, including but not limited to, the *Ozone Protection and Synthetic Greenhouse Gas Management Act 1989* (Commonwealth) and *The Australian Refrigerant Handling Code of Practice 2007*.

All decommissioned water heaters and components that have been removed from the premises must be recycled or disposed of in accordance with section A.3.14.

3.1.7. Calculation of energy savings factor

The energy savings factor must be calculated in accordance with section 3.1.5 of the eligible activities determination.

3.1.8. Recording and reporting

For this activity the following information must be recorded—

- (a) all required information in section 7.3 for periodic activity reporting and section 8.2 for compliance period reporting of the record keeping and reporting code of practice;
- (b) the Activity ID;
- (c) the number of water heaters installed under the activity;
- (d) the installed product brand name, model number, tank serial number and collector serial number(s) and system identifier (where applicable) for each system installed to be recorded, and geotagged and time stamped photographic evidence to be retained;
- (e) the product type for each system installed being an electric boosted solar water heater or an electric heat pump water heater;
- (f) the storage capacity of the cylinder of each specified high efficiency water heater installed;
- (g) for solar water heaters, the number of collectors for each solar water heater installed;
- (h) for solar systems, the annual savings (solar contribution), peak load (MJ/day), value of Bs and Be (in GJ), system type and collector type as recorded on the relevant product register for the solar water heater for Zone 4;
- (i) for heat pump water heaters, the number of certificates for an installation in Zone 5 as recorded on the relevant product register for the heat pump water heater;
- (j) the approximate storage capacity of the tank of the water heater being replaced;

- (k) the year of manufacture of the water heater being replaced as recorded on the product rating plate, if it can be reasonably identified;
- (l) for multiple activity record forms, the authorised installer identifier of each installer that carried out the activity;
- (m) for electrical work, the number of the relevant certificate of electrical safety completed for the work in accordance with the *Electricity Safety Act 1971*;
- (n) for plumbing work, the hydraulic certificate of compliance number completed for the work in accordance with the *Water and Sewerage Act 2000*;
- (o) the type and certificate number of any other statutory certification for the work or associated work, if applicable;
- (p) the licence or registration number (however described), if applicable, of each person who provided a statutory certification;
- (q) if the activity is required to be undertaken together with Activity 3.3, the associated activity record form number for Activity 3.3 if recorded on a separate activity record form;
- (r) the energy savings factor for the activity calculated in accordance with section 3.1.5 of the eligible activities determination as in force at the time the activity was completed; and

Note Activity 3.1 must be undertaken in conjunction with Activity 3.3 to replace all relevant shower fixture outlets where required by Schedule 2, Part 2.6 of the Water and Sewerage Regulation 2001. The associated retailer ascribed form number for the correlating Activity 3.3 must be recorded on the form for this activity;

- (s) Where an existing electric resistance hot water heater is decommissioned as part of the activity, record—
 - i. the model, brand and serial number or product number of the product being decommissioned, where ascertainable (geotagged and time stamped photographic evidence to be retained); and
 - ii. recycling or decommissioning evidence such as recycling certificate or similar.

3.2. Decommission a gas or liquefied petroleum gas water heater and install a specified high efficiency water heater

3.2.1. Application of this section

This section applies to undertaking Activity 3.2 – decommission a gas or liquefied petroleum gas water heater and install a specified high efficiency water heater – as defined in section 3.2 of the eligible activities determination as—

Activity ID 3.2 – In accordance with the prescribed minimum activity performance specifications, decommissioning a natural gas or liquefied petroleum gas water heater in a hot water system servicing sanitary fixtures and appliances and installing a specified high efficiency water heater.

3.2.2. Competency requirements

3.2.2.1. Installer competency requirements

Activity 3.2 must be carried out by an authorised installer(s)—

- (a) where electrical wiring is involved, the authorised installer is the holder of an unrestricted electrician licence issued under the *Construction Occupations (Licensing) Act 2004*;
- (b) where plumbing work is involved, the authorised installer is the holder of a plumbing licence that is issued under the *Construction Occupations (Licensing) Act 2004*;
- (c) where gas fitting work is involved, the authorised installer is the holder of a gas fitter's licence that is a general or advanced licence issued under the *Construction Occupations (Licensing) Act 2004*;
- (d) where Liquefied Petroleum Gas (LPG) gas fitting work is involved, the authorised installer is the holder of a gas fitter's licence that is a general or advanced licence with an LPG gasfitter (vapour phase) licence endorsement issued under the *Construction Occupations (Licensing) Act 2004*;
- (e) if the installed product is a solar water heater, the authorised installer has completed and obtained a Statement of Attainment for 80911ACT *Course in installing solar heated water systems* or an equivalent course;
- (f) where refrigerant gases are required to be installed and/or recovered, the authorised installer is a licensed technician for the handling of refrigerant gases with the Australian Refrigeration Council (Licence Type: RAC01);
- (g) who is the holder of a General Construction Induction Card; and
- (h) who has completed all required training prescribed in section A.4.

Note The retailer must retain records of training and/or determinations of competency for all authorised installers undertaking this activity. These records must be made available to the administrator on request.

3.2.2.2. Other installer competencies

An authorised installer(s) must be proficient in all relevant competencies required for undertaking the activity including, but not limited to—

- (a) decommissioning an existing gas water heater in accordance with the *Water and Sewerage Act 2000* and Plumbing Code of Australia, and the *Gas Safety Act 2000* and AS 5601;
- (b) installing, commissioning and testing an electric water heater in accordance with the *Water and Sewerage Act 2000* and Plumbing Code of Australia, and the *Electricity Safety Act 1971* and AS 3000;
- (c) explaining the use, operation and any safety requirements of an installed product; and
- (d) understanding the decommissioning, recycling and disposal requirements for the activity.

3.2.3. Determining eligibility of premises

A premises is an eligible premises for Activity 3.2 provided that—

- (a) the premises is a residential or a business premises as defined in the eligible activities determination;
- (b) the premises has an existing gas water heater;
- (c) if the installed product is a solar water heater—

- i. the roof structure is suitable for supporting the solar water heater and any components of the solar water heater;

Note If the authorised installer is unable to verify the adequacy of the roof structure in supporting the solar water heater or any components of the solar water heater a structural engineer must be consulted prior to starting the installation.

- ii. the roof structure does not contain asbestos; and

Note Bonded asbestos products are found on many residential and commercial buildings. These materials can become friable with age and pose additional risks requiring management controls beyond the scope of this code. If friable asbestos is found, risk treatment steps described in section A5.5 should be followed.

- iii. the roof structure allows the solar water heater solar collectors to be orientated within plus or minus 45 degrees from north with an inclination of between 15 and 45 degrees from horizontal;

- (d) only solar water heaters fitted to class 1 or class 10a buildings are exempt from needing building approval. Exempt building and building work is provided in the *Building (General) Regulation 2008* accessed at <http://www.legislation.act.gov.au/sl/2008-3/current/pdf/2008-3.pdf>; and

- (e) if the installed product is a solar water heater—

- i. it can be installed in accordance with the requirements for exemption from development approval in the *Planning and Development Act 2007*; or
 - ii. the lessee has obtained development approval for the proposed solar water heater installation.

Note Section 1.27 of Schedule 1, Part 1.3, Division 1.3.1 of the Planning and Development Regulation 2008 provides the requirements for solar water heaters to be exempt from requiring development approval. These can be accessed at <http://www.legislation.act.gov.au/sl/2008-2/current/pdf/2008-2.pdf>.

3.2.4. Installed product requirements

The installed product must meet the installed product requirements in section 3.2.3 of the eligible activities determination.

If the installed product is a solar water heater, it must be suitable for use in areas that experience frost conditions.

The installed product must have a minimum product warranty of two years.

3.2.5. Minimum activity performance specifications

The minimum specifications for Activity 3.2 to be a compliant eligible activity are the minimum activity performance specifications in section 3.2.2 of the eligible activities determination and the provisions in this section of the code.

In addition—

- (a) the installed product must be installed in accordance with the *Water and Sewerage Act 2000*, Plumbing Code of Australia and, *Electricity Safety Act 1971* and AS 3000;
- (b) where required, existing components of the installation are to be upgraded to meet current standards of the *Water and Sewerage Act 2000* and Plumbing Code of Australia and, *Electricity Safety Act 1971* and AS 3000; and

- (c) refrigerants, where used, must be used in accordance with any relevant law, including but not limited to, the *Ozone Protection and Synthetic Greenhouse Gas Management Act 1989* (Commonwealth) and *The Australian Refrigerant Handling Code of Practice 2007*.

Note Refer to the Australian Institute of Refrigeration, Air Conditioning and Heating *Flammable Refrigerants Safety Guide* for further explanation on managing the health and safety risks associated with refrigeration equipment and systems that use a flammable refrigerant (http://www.airah.org.au/imis15_prod/Content_Files/TechnicalPublications/Flammable-Refrigerant-Safety-Guide-2013.pdf).

3.2.5.1. Testing

The authorised installer must test all products after installation to verify the product is correctly installed in accordance with manufacturer's instructions.

The installer must ensure that noise levels do not exceed 35 decibels (dB) at each neighbour's boundary as required under the *Environment Protection Act 1997*.

3.2.6. Decommissioning, recycling and disposal

Any decommissioned existing water heater and related components, including pipework, circuits and circuit tails, must be removed from the premises, if reasonable.

If the replaced space heater contains refrigerated gases, refrigerants must be disposed of in accordance with any relevant law, including but not limited to, *The Ozone Protection and Synthetic Greenhouse Gas Management Act 1989* (Commonwealth) and *The Australian Refrigerant Handling Code of Practice 2007*.

All decommissioned water heaters and components that have been removed from the premises must be recycled or disposed of in accordance with section A.3.14.

3.2.7. Calculation of energy savings factor

The energy savings factor must be calculated in accordance with section 3.2.5 of the eligible activities determination.

3.2.8. Recording and reporting

For this activity the following information must be recorded—

- (a) all required information in section 7.3 for periodic activity reporting and section 8.2 for compliance period reporting of the record keeping and reporting code of practice;
- (b) the Activity ID;
- (c) the number of water heaters installed under the activity;
- (d) the installed product brand name, model number, tank serial number and collector serial number(s) and system identifier (where applicable) for each system installed to be recorded, and geotagged and time stamped photographic evidence to be retained;
- (e) the installed product type for each system installed being an electric boosted solar water heater or an electric heat pump water heater;
- (f) the storage capacity of the cylinder of each specified high efficiency water heater installed;
- (g) for solar water heaters, the number of collectors for each solar water heater installed;
- (h) for solar water heaters, the annual savings (solar contribution), peak load (MJ/day), value of Bs and Be (in GJ), system type and collector type as recorded on the relevant product register for the solar water heater for Zone 4;
- (i) for electric heat pump water heaters, the number of certificates for an installation in Zone 5 as recorded on the relevant product register for the heat pump water heater;

- (j) if the water heater being replaced is a storage water heater, the approximate storage capacity of the tank of the water heater being replaced, otherwise the rated flow rate of the instantaneous gas water heater;
- (k) the year of manufacture of the water heater being replaced as recorded on the product rating plate, if it can be reasonably identified;
- (l) for multiple activity record forms, the authorised installer identifier of each installer that carried out the activity;
- (m) for plumbing work, the hydraulic certificate of compliance number completed for the work in accordance with the *Water and Sewerage Act 2000*;
- (n) where gas fitting work is undertaken, the notice number of the Notification and Certification of Compliance for Plumbing and Gas Work (Minor Works) in accordance with the *Gas Safety Act 2000*;
- (o) for electrical work if applicable, the number of the relevant certificate of electrical safety completed for the work in accordance with the *Electricity Safety Act 1971*;
- (p) the type and certificate number of any other statutory certification for the work or associated work;
- (q) the licence or registration number (however described), if applicable, of each person who provided a statutory certification;
- (r) if the activity is undertaken together with Activity 3.3, the associated activity record form number for Activity 3.3 if recorded on a separate activity record form;
- (s) the energy savings factor for the activity calculated in accordance with section 3.2.5 of the eligible activities determination as in force at the time the activity was completed; and

Note *The gas fitting and plumbing work may be certified on the same hydraulic certificate of compliance, where an installer is licensed to undertake both the gas fitting and plumbing work components of the activity.*

- (t) where an existing hot water heater is decommissioned as part of the activity, record—
 - i. the model, brand and serial number or product number of the product being decommissioned, where ascertainable (geotagged and time stamped photographic evidence to be retained); and
 - ii. recycling or decommissioning evidence such as recycling certificate or similar.

3.3. Replace an existing shower fixture outlet with a low flow shower fixture outlet

3.3.1. Application of this section

This section applies to undertaking Activity 3.3 – replace an existing shower fixture outlet with a low shower fixture outlet – as defined in section 3.3 of the eligible activities determination as—

Activity ID 3.3 – In accordance with the prescribed minimum activity performance specifications, removing a shower fixture outlet or outlets with a flow rate of greater than 9 litres per minute and replacing with a shower fixture outlet or outlets with a flow rate of 9 litres per minute or less.

3.3.2. Competency requirements

3.3.2.1. Installer competency requirements

Activity 3.3 must be carried out by an authorised installer—

- (a) where plumbing work is involved, the authorised installer is the holder of a plumbing licence that is issued under the *Construction Occupations (Licensing) Act 2004*; and
- (b) who has completed all required training prescribed in section A.4.

3.3.2.2. Other installer competencies

An authorised installer must be proficient in all relevant competencies required for undertaking the activity including, but not limited to—

- (a) determining whether an existing shower fixture outlet meets the installed product requirements;
- (b) determining whether a requirement for a flow rate of 9 litres or less applied at the time an existing shower fixture outlet was, or was likely to have been, installed;
- (c) removing, installing, commissioning and testing a shower fixture outlet in accordance with the *Water and Sewerage Act 2000* and the Plumbing Code of Australia;
- (d) assessing whether a shower fixture outlet is incompatible with a water heater or hot water system or interferes with the normal operation of a shower;
- (e) explaining the use, operation and any safety requirements of an installed product; and
- (f) understanding the decommissioning, recycling and disposal requirements for the activity

3.3.3. Determining eligibility of premises

A premises is an eligible premises for Activity 3.3 if—

- (a) the premises is a residential or business premises as defined in the eligible activities determination;
- (b) the premises has at least one shower fixture outlet that has a maximum flow rate of greater than 9 litres per minute; and
- (c) the shower fixture outlet was not required to have a flow rate of 9 litres or less under the plumbing regulations in force at the time of the installation.

Note On 1 July 2005 new provisions commenced in the ACT Water and Sewerage Regulation 2001 that all domestic shower fixture outlets installed were required to meet minimum water efficiency standards of 9 litres per minute or less. Shower fixture outlets installed after that time should have a flow rate of no greater than 9 litres per minute.

3.3.4. Minimum activity performance specifications

The minimum specifications for Activity 3.3 to be a compliant eligible activity are the minimum activity performance specifications in section 3.3.2 of the eligible activities determination and the provisions in this section of this code.

3.3.4.1. Pre-installation requirements

The installed product must meet the installed product requirements section 3.3.3 of the eligible activities determination and have a product warranty of a minimum two years.

In addition—

- (a) the installer must test the flow rate of a shower fixture outlet to be replaced to determine its eligibility for replacement;

Note The flow rate of a shower fixture outlet should be measured with a simple bucket test with the water running at a typical showering temperature. Hold a bucket under the running shower for 15 seconds. Measure the quantity of water captured and multiply by four to ascertain the per minute flow rate. Water in the bucket should be disposed of on a garden or other sustainable use.

- (b) a shower fixture outlet must be installed and commissioned in accordance with the *Water and Sewerage Act 2000* and using a compliance method that complies with the Plumbing Code of Australia;

- (c) a low flow shower fixture outlet must not be installed where it would be incompatible with the operation of the hot water system installed in the premises or interfere with the normal operation of the shower in which it is installed; and

Note 1 Low flow shower fixture outlets are typically not compatible with gravity-fed water heaters as most already have low flow rates. They may also not be compatible with older instantaneous gas water heaters where reduced flow can interfere with the operation of the water heater.

Note 2 Care should be taken in selecting a shower fixture outlet of higher efficiency levels, particularly less than 6 litres per minute. Water delivery at very high efficiency levels may cause discomfort to users of the shower.

- (d) a shower fixture outlet that has a flow rate of 9 litres or less must not be replaced under this activity.

A replaced shower fixture outlet must be removed from the premises and decommissioned.

3.3.4.2. Testing after installation

The authorised installer must test all products after installation to verify the product—

- (a) is correctly installed in accordance with manufacturer's instructions;
- (b) does not leak; and
- (c) is operating correctly at a typical showering temperature.

If testing of the new shower fixture outlet demonstrates that it causes a failure in the hot water system to heat water to a standard temperature, the installer must reinstall the original shower fixture outlet, or a shower fixture outlet with a similar flow rate and quality to the original showerhead if available, unless a low flow shower fixture outlet is required to be installed under Schedule 2, Part 2.6 of the *Water and Sewerage Regulation 2001*.

If a low flow shower fixture outlet is required to be installed under Schedule 2, Part 2.6 of the *Water and Sewerage Regulation 2001*, the authorised installer must do or arrange for the work that is necessary to make the installation compliant with that regulation and the Plumbing Code of Australia.

Note If alterations are required to the hot water system to make the installation compliant, the work must be carried out by an appropriately licensed person.

3.3.5. Calculation of energy savings factor

The energy savings factor must be calculated in accordance with section 3.3.5 of the eligible activities determination.

Note The maximum number of shower fixture outlets that can be claimed in a residential premises is two.

3.3.6. Recording and reporting

For this activity the following information must be recorded—

- (a) all required information in section 7.3 for periodic activity reporting and section 8.2 for compliance period reporting of the record keeping and reporting code of practice;
- (b) the Activity ID;
- (c) for each installed product—
 - i. the brand name and model number;
 - ii. water efficiency rating when assessed and labelled in accordance with AS/NZS 6400; and
 - iii. the maximum flow rate of the fixture outlet;
- (d) for each product replaced, its measured flow rate (litres/minute);
- (e) the number of activity item units (N) determined in accordance with section 3.3.5(a)ii of the eligible activities determination;
- (f) for multiple activity record forms, the authorised installer identifier of each installer that carried out the activity;
- (g) for plumbing work, the hydraulic certificate of compliance number completed for the work in accordance with the *Water and Sewerage Act 2000*;
- (h) the type and certificate number of any other statutory certification for the work or associated work, if applicable;
- (i) the licence or registration number (however described), if applicable, of each person who provided a statutory certification; and
- (j) the energy savings factor for the activity calculated in accordance with section 3.3.5 of the eligible activities determination as in force at the time the activity was completed.

Note The maximum number of shower fixture outlets that can be claimed per residential premises is two.

4. Lighting activities

4.1. Residential lighting activities

4.1.1. Application of this section

This section applies to undertaking Activity 4.1 – lighting activities – as defined in section 4.1 of the eligible activities determination as—

In accordance with the prescribed minimum activity performance specifications, installing one or more of—

- (a) **Activity ID 4.1(a)** – low energy general lighting service (GLS) lamp in place of a mains voltage incandescent GLS lamp of at least 25 watts (tungsten filament type) or 18 watts (tungsten halogen type);
- (b) **Activity ID 4.1(b)** – low energy reflector lamp in place of a mains voltage incandescent reflector lamp;
- (c) **Activity ID 4.1(c)** – low energy 12 volt lamp to replace 12 volt halogen;
- (d) **Activity ID 4.1(d)** – mains voltage low energy downlight fitting in place of existing 12 volt halogen downlight fitting; or
- (e) **Activity ID 4.1(e)** – low energy lamp with a GU10 base in place of existing mains voltage halogen lamp of at least 35 watts with a GU10 base.

4.1.2. Competency requirements

4.1.2.1. Installer competency requirements

Activity 4.1 must be carried out by an authorised installer who—

- (a) has completed all required training prescribed in section A.4; and
- (b) where wiring work is involved, the installation is undertaken by a person with an unrestricted electrician licence issued under the *Construction Occupations (Licensing) Act 2004* and a Certificate of Electrical Safety is provided.

4.1.2.2. Health and safety

An authorised installer must have the required workplace health and safety training and qualifications. For instance—

- (a) if working at heights is required, has completed RIIWHS204D *Work safely at heights* or an equivalent preceding unit of competency, either completed within the last three years or obtained a Certificate of Attendance for a “Work safely at heights” refresher course within the last three years;
- (b) has completed 10675NAT *Asbestos awareness* or equivalent course; and
- (c) if entry to a roof cavity is required, has completed RIIWHS202D *Enter and work in confined spaces* or an equivalent preceding unit of competency, either completed within the last three years or obtained a Certificate of Attendance for an “Enter and work in confined spaces” refresher course within the last three years.

4.1.2.3. Training

An authorised installer must be trained in the physical practice of replacing lamps or luminaires as appropriate to the work the installer will be undertaking, and have all relevant competencies for the lighting activities including, but not limited to—

- (a) determining if an existing lamp or luminaire meets the existing equipment requirements;

- (b) being familiar with standard terms for lighting products and able to locate product information for a product as required to complete activity records, energy savings factors calculations and provide information to consumers, including for—
 - i. the product output in lumens;
 - ii. the product lighting efficacy in lumens/watt (lm/W);
 - iii. the product manufacturer rated hours;
 - iv. the power factor of the lamp;
 - v. lighting source efficiency;
 - vi. colour temperature;
 - vii. beam angle;
- (c) identifying a general lighting services non-reflector lamp, a reflector lamp, or a low energy lamp;
- (d) for lighting Activity 4.1(b), identifying the lamp base of the installed halogen lamp to ascertain as to whether the lamp base is a GU10 or MR16 (4.1(c)). If it is an eligible 240V GU10 halogen lamp, replacing it with approved replacement equipment (installed product);
- (e) for lighting Activity 4.1(c), only replacing the existing equipment (halogen MR16 lamp base) if he/she is a person with, or is an apprentice directly supervised by a person with, an unrestricted electrical licence issued under the *Construction Occupations (Licensing) Act 2004*;
- (f) prior to installation, the person with an unrestricted electrical licence issued under the *Construction Occupation (Licensing) Act 2004* will need to—
 - i. verify compatibility with pre-existing halogen transformer;
 - ii. verify compatibility with any fitted dimmer switch, timer, motion sensor, daylight switch or other automated switch or control; and
 - iii. ensure that pre-existing luminaire is not connected to dangerous or non-compliant wiring before proceeding with safe installation of replacement equipment (installed product);
- (g) selecting an appropriate lamp for particular types of luminaire including assessing—
 - i. whether a lamp or luminaire is incompatible with a particular luminaire or circuit; and
 - ii. determining an equivalent light output to a replaced lamp (existing equipment);
- (h) installing and testing for correct operation of the product;
- (i) understanding the requirements for electrical wiring work in the ACT;
- (j) explaining the use, operation and any safety requirements of an installed product; and
- (k) replacing existing equipment that is in working order immediately prior to removal. The obligated party must not claim energy savings or pass on associated costs for replacing lamps that are not in working order at the time of installation. They may however invoice the end user separately and keep that transaction outside of the Scheme.

4.1.3. Determining eligibility of premises

A premises is an eligible premises for Activity 4.1 if—

- (a) the premises is a residential or business premises as defined in the eligible activities determination;
- (b) the premises has at least one lamp or luminaire that does not meet the requirements of a replacement equipment (installed product); and

- (c) a compliant lamp or luminaire can be installed in accordance with the minimum activity performance specifications in this section.

4.1.4. Minimum activity performance specifications

The minimum specifications for Activity 4.1 to be a compliant eligible activity are the minimum activity performance specifications in section 4.1.2 of the eligible activities determination and the provisions in this section of this code.

In addition—

- (a) the installed product must meet the installed product requirements in section 4.1.3 of the eligible activities determination and have a minimum product warranty of two years;

Note The installed product must meet all product safety requirements including those for prescribed articles under electricity safety legislation, if applicable.

- (b) an authorised installer must physically install all products for this activity;
- (c) authorised installers must use best endeavours to first target high usage lighting for installation of products;
- (d) installed lamps and luminaires must exhibit maintained light output of at least those of the replaced lamps or existing luminaires (existing equipment), except for situations where the existing equipment provides excessive lighting;
- (e) authorised installers must not replace lamps that are already low energy (LED) lamps;
- (f) where replacing a lamp, the authorised installers must remove the replaced inefficient lamp and take away for decommissioning and appropriate disposal;
- (g) if a luminaire is being replaced, a low energy lamp must be installed in the new luminaire;
- (h) no work is to be performed on any luminaire that is not securely fixed to the ceiling or surface material, has any exposed wiring or that appears unsafe;
- (i) an authorised installer who does not hold an appropriate class of electrician licence must not attempt to repair a broken or damaged luminaire or remove a lamp stuck in a luminaire and must advise the consumer that they should seek the advice or assistance of a licensed electrician; and

Note If the installer does not hold an electrician's licence then she or he must not perform any wiring work including to repair the luminaire or have physical contact with any transformer/voltage converter. Other than for a simple exchange of lamps for an existing luminaire as detailed in Clause 4.1.1 (a) and (b) the installation will require a licensed electrician.

- (j) electrical wiring work must be carried out in accordance with the *Electricity Safety Act 1971* and AS/NZS 3000.

Note Electrical wiring work must only be undertaken by a person that holds an appropriate class of electrician licence.

4.1.4.1. Lamp replacement

When replacing a lamp—

- (k) under Clause 4.1.1 (c) or (d), the lighting circuit must be turned off at the customer meter board and a danger tag/lock attached to the meter. If entry to a roof cavity is required, the mains power must be turned off at the customer meter board and a danger tag/lock attached to the meter;
- (l) under Clause 4.1.1 (c), a sample of the existing halogen fittings must be checked to ascertain if insulation is encroaching or covering the fitting. If encroachment or covering is discovered this must first be rectified before the activity is carried out;
- (m) under Clause 4.1.1 (c) or (d), a sample of existing halogen fittings must be checked to ascertain if the wiring is compliant;
- (n) under Clause 4.1.1 (c), the installed lamp must be compatible with the pre-existing halogen transformer or voltage converter used with the replaced halogen lamp; and

- (o) under Clause 4.1.1 (c) the existing transformer must also be checked to confirm it has a regulatory compliance mark (RCM) or approval number issued by the electrical safety regulator.

4.1.4.2. Safety check

If the safety check identifies any areas of non-compliance the customer must be advised they will need to contact a person with an unrestricted electrical licence issued under the *Constructions Occupation (Licensing) Act 2004* to rectify the area of non-compliance.

If the safety check identifies any areas of electrical danger, any installation must not be undertaken and the ACT Electrical Inspectorate must be notified via email at electrical.inspections@act.gov.au.

Once all lamps are replaced under Clause 4.1.1 (c) and (d), a person with an unrestricted electrical licence issued under the *Constructions Occupation (Licensing) Act 2004* will remove the danger tag/lock from the meter, turn on lighting circuit at the customer meter board, check all lamps are working and ensure the customer is satisfied with the light output/colour/design.

4.1.4.3. Other requirements

A lamp must not be installed or connected to a dimmer switch, timer, motion sensor, daylight switch or other automated switch or control, unless specified by the manufacturer as being compatible with such a device.

A lamp or luminaire (existing equipment) that complies with the relevant replacement product requirements must not be replaced under this activity.

Spare replacement lamps must not be left with the resident or business owner.

The installer must inform the consumer about the operation of the product and any safety requirements.

Replaced lamps (existing equipment), transformers and luminaires that are replaced must be removed from the premises and appropriately decommissioned.

4.1.4.4. Testing

The authorised installer must test all replacement products after installation to verify the product—

- (a) is correctly installed in accordance with manufacturer's instructions;
- (b) for a lamp, the lamp is operating correctly in the luminaire and circuit it is installed in;
- (c) for a luminaire, the luminaire is operating correctly in the circuit it is installed in; and
- (d) does not interfere with the normal operation of the lighting installation or the circuit.

Note This includes if the dimmer switch, sensor or other functionality is operating correctly.

A Certificate of Electrical Safety is not required for this activity but the approved installation process must be strictly followed.

Note Bonded asbestos products are found on many residential and commercial buildings. These materials can become friable with age and pose additional risks requiring management controls beyond the scope of this code. If friable asbestos is found, risk treatment steps described in section A5.5 should be followed.

4.1.5. Calculation of energy savings factor

The energy savings factor must be calculated in accordance with section 4.1.5 of the eligible activities determination.

Note The activity energy savings values may not be the same for each type of product or model installed in a premises. Multiple calculations may be required to determine the total energy savings factor for the activity.

4.1.6. Recording and reporting

4.1.6.1. Record and report

For this activity the following information must be recorded—

- (a) all required information in section 7.3 for periodic activity reporting and section 8.2 for compliance period reporting of the record keeping and reporting code of practice;
- (b) the Activity ID;
- (c) for each installed product—
 - i. the brand name and model number;
 - ii. the product type being a general lighting services lamp, a reflector lamp, a low energy lamp, a recessed fitting or an LED fitting;
 - iii. the product output in lumens;
 - iv. the product lighting efficacy in lumens/watt (lm/W);
 - v. the product manufacturer's rated lifetime in hours; and
 - vi. the power factor of the product;
- (d) for each product type the number of activity item units installed (N) determined in accordance with section 4.1.5(a) – (f) of the eligible activities determination as in force at the time the activity was completed;
- (e) for multiple activity record forms, the authorised installer identifier of each installer that carried out the activity;
- (f) for a replacement fitting, the number of the relevant certificate of electrical safety completed for the work in accordance with the *Electricity Safety Act 1971*;
- (g) the make and model of the existing transformers forming part of the installation of Activity 4.1(c);
- (h) the type and certificate number of any other statutory certification for the work or associated work, if applicable; and
- (i) the energy savings factor for the activity, including subtotals for each product type, calculated in accordance with section 4.1.5 of the eligible activities determination as in force at the time the activity was completed.

4.1.6.2. Additional reporting and decommissioning

Additional reporting and decommissioning requirements include—

- (a) weighbridge Certificate also known as 'Pick Up Docket' or 'Bin Movement Form' must accompany the tax invoice from the lamp or luminaire recycler as evidence of the weight of decommissioned lamps or luminaires;
- (b) EEIS related lamp waste must have Recycling Certification issued as part of correct decommissioning lamps;
- (c) EEIS related lamp waste must not be aggregated or mixed with lamp waste from other accounts or contracts;
- (d) the types of EEIS related lamp waste must not be aggregated into one decommissioning, that is—
 - i. incandescent lamps replaced under Activity 4.1(a) must only be weighed with incandescent lamps;
 - ii. halogen lamps replaced under Activity 4.1(c) and 4.1(e) must only be weighed with halogen lamps; and

- iii. reflector lamps replaced under Activity ID 4.1(b) must only be weighed with reflector lamps;
- (e) only incandescent or halogen lamps should be shown on relevant tax invoices – if CFL or mixed loads are sent for decommissioning, with 'mixed' or 'CFL' shown on the tax invoices, then the EEIS energy savings for that weight cannot be claimed and will be considered ineligible;
- (f) the Recycling Certification provided will match the weighbridge certificates and provide final verification of the proper decommissioning of lamps;
- (g) where old CFL lamps are replaced with new CFL lamps, the incorrectly installed lamps must be traced back to the job (Activity Record Form Identifier – ARFI) and recorded in the master stock reconciliation sheet to ensure that no energy saving is incorrectly claimed;
- (h) where lamps are returned by a resident, the lamps must be traced back to the job (ARFI) to ensure that no energy saving is incorrectly claimed;
- (i) where CFL lamps (containing mercury) are broken during installation or fail under warranty, the lamps will need to be tracked and discarded in accordance with Environment Protection Authority (EPA) law requirements as 'trackable' waste – contact the ACT Government's EPA via Access Canberra for more information;
- (j) EEIS related lamp waste must have Destruction Certification issued as part of the correct decommissioning of lamps;
- (k) the administrator requires that the obligated party report the master stock reconciliation sheet on a quarterly basis with the possibility of random site inspections of their premises and records conducted by EEIS Authorised Persons;
- (l) photographic evidence is required as proof of the decommissioned halogen lamps for each installation/ARFI. These photographs must be geocoded/geotagged to the corresponding installation address and be made available upon request to the administrator; and
- (m) geotagged and timestamped photographic evidence of the make and model of the existing transformers forming part of the installation of Activity 4.1(c) is required.

Note 1 Certain requirements such as disposal of waste products, or lodgement of statutory certifications, may occur on a date subsequent to the date of installation of a product. All relevant information about the installation of the product should be completed immediately after the installation has been carried out. Information about the disposal of waste products may be recorded at a later time when it is complete.

4.2. Commercial lighting upgrade activities

4.2.1. Application of this section

This section applies to undertaking Activity 4.2 – commercial lighting upgrade – as defined in section 4.2 of the eligible activities determination as—

Activity ID 4.2 – In accordance with the prescribed minimum activity performance specifications, being the upgrade of building lighting equipment in a business premises by replacing it with more efficient lighting equipment.

4.2.2. Competency requirements

4.2.2.1. Installer competency requirements

Activity 4.2 must be carried out by an authorised installer(s) who—

- (a) has completed all required training prescribed in section A.4;
- (b) is a licensed ACT electrician; and
- (c) holds a General Construction Induction Card.

4.2.2.2. Training in replacing lighting equipment

An authorised installer shall be trained in the physical practice of replacing lighting equipment as appropriate for the work to be undertaken, and have all relevant competencies for the work, including, but not limited to—

- (a) being familiar with standard terminology for lighting products;
- (b) being able to accurately identify the existing lighting equipment, as required to complete activity records and perform energy saving factor calculations;
- (c) being able to locate product information for the new lighting equipment, as required to complete activity records and perform energy saving factor calculations;
- (d) providing information to consumers regarding the new lighting equipment, including for—
 - i. its operation and any safety requirements;
 - ii. light output in lumens;
 - iii. rated manufacturer's lifetime;
 - iv. colour temperature and colour rendering;
 - v. expected glare;
 - vi. expected changes in performance over time; and
 - vii. resultant long-term illumination levels and uniformity of illuminance; and
- (e) installing, commissioning and testing for correct operation of the new energy efficient lighting equipment which reduces electricity consumption without reducing service levels below levels required under AS/NZS 1680.

4.2.2.3. Other training

All authorised installers must receive effective training in modified light emitting diode (LED) linear tube upgrade, before undertaking modified LED linear tube installations, including the safety requirements of AS/NZS 60598.

Commercial lighting upgrades shall be implemented by persons who are suitably trained and experienced in installing energy efficient commercial lighting systems, which satisfy the

consumer and achieve the colour temperature, colour rendering, glare, long term illumination levels and uniformity of illuminance to meet—

- (a) the relevant requirements of AS/NZS 1680;
- (b) the requirements of the National Construction Code section F4.4, *Artificial Lighting*; and
- (c) where applicable, AS 2293 *Emergency escape lighting and exit signs for buildings* and the National Construction Code section E4.

Note 1 For further explanation see NSW Energy Saving Scheme (ESS) Commercial Lighting Method Guide – 3.8.2 Performance requirements for upgrades of building lighting (http://www.ess.nsw.gov.au/Methods_for_calculating_energy_savings/Commercial_Lighting).

Note 2 For a list of relevant standards for commercial lighting energy efficiency improvements in the AS/NZS 1680 series see NSW ESS Commercial Lighting Method Guide – Appendix B (http://www.ess.nsw.gov.au/Methods_for_calculating_energy_savings/Commercial_Lighting).

4.2.3. Determining eligibility of premises

A premises is an eligible premises for Activity 4.2 if—

- (a) the premises is a business premises as defined in the eligible activities determination;
- (b) the premises is a building that is classified under the National Construction Code as either Class 3, 5, 6, 7, 8, 9, 10 or the Common Areas of Class 2;

Note For detailed explanation of Classes 3-10 in the National Construction Code see NSW ESS Commercial Lighting Method Guide – Appendix A (http://www.ess.nsw.gov.au/Methods_for_calculating_energy_savings/Commercial_Lighting).

- (c) the existing lighting equipment is in working order immediately prior to removal and has not previously been installed as part of a commercial lighting upgrade activity; and
- (d) the new lighting equipment will result in a reduction in the consumption of electricity compared to what would have otherwise been consumed without reducing service levels below pre-upgrade levels or National Construction Code requirements.

4.2.4. Minimum activity performance specifications

The minimum specifications for Activity 4.2 to be a compliant eligible activity are the minimum activity performance specifications in section 4.2.2 of the eligible activities determination and the provisions in this section of this code.

In addition—

- (a) the new lighting equipment shall meet the installed product requirements in section 4.2.3 of the eligible activities determination, have a minimum LED commercial lighting product warranty of three years, and, in the case of Hi-Bay lighting, a minimum of five years;
- (b) energy efficiency upgrades must reduce electricity consumption without reducing service levels below pre-upgrade levels;
- (c) lighting shall be fully de-energised before any work commences;
- (d) an authorised installer shall physically install all new lighting equipment for this activity;
- (e) electrical wiring work must be carried out in accordance with the *ACT Electricity Safety Act 1971* as well as AS/NZS 3000.

Note Under the AS/NZS 3000, where there is electrical wiring work of the power circuit to be done, it is a requirement to install a Residual Current Detector (RCD) if no RCD is currently being used.

- (f) where electrical wiring work is involved the authorised installer must provide a Certificate of Electrical Safety;

Note Where the business does not have a Residual Current Detector (RCD), the installer should advise the business of the safety reasons to install an RCD. The installer should record if the business does not have an RCD and that the installer has recommended installation of an RCD to the business owner or manager.

- (g) no work is to be performed on any equipment that has any exposed wiring or that appears unsafe, unless it is made safe by a licensed electrician. If any areas of electrical danger persist, installation shall not be undertaken and the ACT Electrical Inspectorate shall be notified;

Note The ACT Electrical Inspectorate can be notified via email at electrical.inspections@act.gov.au

- (h) to ensure electrical safety, any terminal cover, safety device or guard which is or was supplied by the manufacturer as part of the original fixture must be reinstalled or, if missing, replaced and installed as part of the completion of this activity; and
- (i) new lighting equipment must not be installed or connected to a dimmer switch, timer, motion sensor, daylight switch or other automated switch or control, unless specified by the manufacturer as being compatible with such a device.

4.2.4.1. Testing

The installer must—

- (a) check that all new lighting equipment is working correctly and installed in accordance with manufacturer's instructions;
- (b) inform the consumer about the operation of the product and any safety requirements; and
- (c) demonstrate that the consumer is satisfied with the light levels, colour temperature, glare and control regime, as well as the overall lighting design. The installer shall not compromise long-term illumination levels and uniformity of illuminance and these shall meet or exceed pre-existing levels, unless otherwise agreed to by the consumer.

4.2.4.2. Commercial lighting upgrade requirements

Commercial lighting upgrades shall meet the relevant requirements of the following—

- (a) AS/NZS 1680;
- (b) the National Construction Code section F4.4, *Artificial Lighting*; and
- (c) where applicable, AS 2293 *Emergency escape lighting and exit signs for buildings* and the National Construction Code section E4.

4.2.4.3. Consumer dissatisfaction

Where the new lighting equipment has not been installed to the demonstrated satisfaction of the consumer, the installer shall replace any components of the equipment that are causing the dissatisfaction, at no expense to the recipient. Such a request shall be acted upon if made within 20 business days of the installation of the new lighting equipment.

Note Bonded asbestos products are found on many residential and commercial buildings. These materials can become friable with age and pose additional risks requiring management controls beyond the scope of this code. If friable asbestos is found, risk treatment steps described in section A5.5 should be followed.

4.2.5. Decommissioning, recycling and disposal

Existing lighting equipment must be decommissioned and removed for appropriate disposal.

Lamp waste from the Scheme must not be aggregated or mixed with lamp waste from other accounts or contracts not a part of the Scheme.

Where fluorescent lamps containing mercury are broken during installation or fail under warranty, the lamps must be tracked and discarded in accordance with legal Environment Protection Authority (EPA) requirements as 'trackable' waste.

Note Contact the ACT Government's EPA via Access Canberra for more information on the requirements for trackable waste.

Fluorescent lamps must be recycled.

Lamp waste must be weighed and have Destruction Certification or Recycling Certification issued for disposal.

Incandescent (including halogen) lamp waste must not be aggregated with fluorescent lamp waste and must be weighed separately. If the tax invoices show 'mixed' or 'CFL' or 'fluorescent' then the energy savings for that activity cannot be claimed.

Note All removed lighting equipment (including lamps, ballasts and control gear) needs to be properly decommissioned and certified in the form of a destruction certificate/recycling certificate (bulk certificates are acceptable).

The Destruction Certification or Recycling Certification must match the Weighbridge Certificate.

4.2.6. Calculation of energy savings factor

For Activity 4.2, the energy savings factor shall be calculated in accordance with section 4.2.5 of the eligible activities determination.

4.2.7. Recording and reporting

4.2.7.1. Record and report

For this activity the following information must be recorded—

- (a) all required information in section 7.3 for periodic activity reporting and section 8.2 for compliance period reporting of the record keeping and reporting code of practice;
 - (b) the ACT Electrician licence number of the installer;
 - (c) the license type and number of any license required to be held by an authorised installer to complete the activity;
 - (d) the certificate number or tracking code of the relevant Certificate of Electrical Safety completed for the work in accordance with the *Electricity Safety Act 1971*;
 - (e) the type and certificate number of any other statutory certification for the work or associated work, if applicable;
 - (f) for each installed product—
 - i. the brand name and model number as listed on the relevant product register;
 - ii. the product type/category name as listed on the relevant product register;
 - iii. the number of items installed; and
 - iv. the space type the product is installed in as per the NSW '*Energy Saving Scheme Rule of 2009*' Table A10.2 or A10.3 as applicable and as current at the time of implementation;
- Note Table A10.2 and Table A10.3 refer to NSW 'Energy Savings Scheme Rule of 2009, Effective from 28 April 2017' Schedule A – Table A10.2 'Operating Hours for Lighting Upgrades by space type' and Table A10.3 'Annual Operating Hours for Lighting Upgrades by building type', respectively.*
- v. the name of the product register that the lamp or luminaire is listed on (e.g. VEET, ESS); and
 - vi. a yes/no statement as to whether the space in which the product is installed is air conditioned;
 - (g) for multiple activity record forms, the authorised installer identifier of each installer that carried out the activity;
 - (h) the classification of the business premises in accordance with Australian and New Zealand Standard Industrial Classification (ANZSIC) codes at the divisional level;
 - (i) an indication of whether the business consumes up to and including 160MWh per annum (a small consumer) or greater than 160MWh per annum (a large consumer) per National Meter Identifier in the 12 months prior to upgrade;
 - (j) the energy savings factor for the activity calculated in accordance with section 4.2.5 of the eligible activities determination as in force at the time the activity was completed;

- (k) the Energy Savings Calculation result in MWh from the IPART Commercial Lighting Calculation Tool as current at the time the activity is undertaken; and

Note The IPART Commercial Lighting Calculation Tool is published by the ESS Administrator on the ESS website at http://www.ess.nsw.gov.au/Methods_for_calculating_energy_savings/Commercial_Lighting.

- (l) the value of any co-contribution amounts in Australian Dollars (AUD) as recorded on a tax invoice for the activity.

4.2.7.2. Evidence

For Activity 4.2 the following evidencing documents must be kept and produced upon request—

- (a) a copy of the relevant Certificate of Electrical Safety completed for the work in accordance with the *Electricity Safety Act 1971*;
- (b) a copy of any other statutory certification for the work or associated work, if applicable;
- (c) where the installer has identified the premises does not have a Residual Current Device (RCD), written evidence that the business owner or authorised contact has been informed;
- (d) a copy of the IPART Commercial Lighting Calculation Tool, or similar tool using the same calculations, as used to calculate the MWh savings for the activity. This must be the actual tool used and not a report;
- (e) acknowledgement by the recipient that they have received written information on—
 - i. the details of the new lighting equipment, including colour temperature, colour rendering, illumination levels and expected long-term illumination levels (taking into account depreciation of the light source over 10 years); and
 - ii. the steps the recipient can take should the performance of the new lighting equipment be unsatisfactory;
- (f) geotagged and timestamped photographic evidence that agrees with the date and location of the installation—
 - i. taken outside of the premises and identifying the business;
 - ii. of each space specified in the ESS Commercial Lighting Calculation Tool (pre and post installation);
 - iii. of each type or variation of lamp as specified in the ESS Commercial Lighting Calculation Tool (pre and post upgrade), for each space;
 - iv. of each type of pre-existing ballast or transformer, clearly showing any and all identifying markings, for each space;
 - v. of each type of modification made showing wiring and addition or removal of ballast/transformer, which clearly shows markings of both, for each space;
 - vi. showing the decommissioned luminaries and control gear; and
 - vii. of the air conditioner, vents or outlets for each space.

Note All photographs must be clear and in focus. They must also include relevant markings and a date/ time stamp and GPS derived longitude and latitude co-ordinates stored in metadata.

- (g) a signed declaration stating that the installation meets all relevant requirements of AS/NZS 1680 and the National Construction Code section F4.4;
- (h) a professionally drawn lighting diagram using accepted industry conventions, symbols, perspectives, units of measurement and notation systems which are usually generated by a professional draftsman or with the aid of Computer Aided Design (CAD) system, and—
 - i. where the recipient of the activity is a large energy consuming customer as defined in 4.2.7.1(i), this lighting diagram is a mandatory requirement;

- ii. where the recipient of the activity is a small energy consuming customer as defined in 4.2.7.1(i), this lighting diagram is optional and may be used as a replacement for some photographic evidence as detailed in 4.2.7.2(h)(iii); and
- iii. where used as evidence for small energy consuming customers, lighting diagrams can replace photographic evidence, except those in 4.2.7.2(f)(vi), provided they—
 - (1) detail the business name, address and Australian Business Number of the customer;
 - (2) detail the contact persons full name and phone number;
 - (3) show each luminaire's location, type and wattage pre and post implementation;
 - (4) indicate the ballast type of the original lighting as recorded on the ESS Tool report;
 - (5) clearly show each space and space name as recorded on the ESS Tool report;
 - (6) clearly show the location of each air conditioner vent or outlet in each space; and
 - (7) indicate lux measurements taken and their relevant locations pre and post installation as used to determine compliance with AS/NZS 1680 and the National Construction Code section F4.4;
- (i) a valid tax invoice, clearly showing the address, the name and contact details of the person billed for the installation, and the amount charged for the installation;
- (j) evidence that all removed lighting equipment (including lamps, ballasts and control gear) has been properly decommissioned in the form of a destruction certificate recycling certificate (bulk certificates are acceptable); and
- (k) where commercial lighting containing mercury (i.e. CFL lamp waste, fluorescent tubes, mercury vapour lamp waste) is being removed and de-commissioned, the lamps will need to be tracked and discarded in accordance with Environment Protection Authority (EPA) law requirements as 'trackable' waste. Contact the ACT Government's EPA via Access Canberra for more information.

Note Different types of lamp waste must not be aggregated and must be weighed separately and reported in a recycling certificate or destruction certificate (bulk certificates are acceptable). If the recycling certificate or destruction certificate shows 'mixed' then the energy savings for that activity cannot be claimed.

5. Appliance activities

5.1. Decommissioning and disposal of refrigerator or freezer

5.1.1. Application of this section

This section applies to undertaking Activity 5.1 – decommissioning and disposal of refrigerator or freezer – as defined in section 5.1 of the eligible activities determination as—

In accordance with the prescribed minimum activity performance specifications, dispose and decommission one or more of—

- (a) **Activity ID 5.1(a)** – a one-door refrigerator or freezer in working order; or
- (b) **Activity ID 5.1(b)** – a two-door refrigerator or freezer in working order.

5.1.2. Competency requirements

Where the removal of refrigerant gases is required, this must be undertaken by an authorised installer who is a licensed technician for decommissioning a refrigerator or freezer to remove refrigerant gases with the Australian Refrigeration Council.

An authorised installer must be proficient in all relevant competencies required for undertaking the activity including, but not limited to—

- (a) determining if a refrigerator or freezer disposed of under this section meets the minimum activity performance specifications;
- (b) decommissioning a refrigerator or freezer in accordance with the *Ozone Protection and Synthetic Greenhouse Gas Management Act 1989* (Commonwealth); and
- (c) disposing of scheduled substances within the meaning and in accordance with the *Ozone Protection and Synthetic Greenhouse Gas Management Act 1989* (Commonwealth).

Note Only a licensed technician or authorised business can decommission a refrigerator or freezer to remove the refrigerant gasses they contain. These refrigerant gases are often potent greenhouse gases; many will also deplete the ozone layer. Licences are issued and administered by the Australian Refrigeration Council (ARC.)

Activity 5.1 must be carried out by an authorised installer who has completed all required training in prescribed in section A.4.

5.1.3. Determining eligibility of premises

A premises is an eligible premises for Activity 5.1 if the premises is a residential or business premises as defined in the eligible activities determination.

5.1.4. Minimum activity performance specifications

The minimum specifications for decommissioning and disposal of refrigerator or freezer activities to be a compliant eligible activity are the minimum activity performance specifications in section 5.1.2 of the eligible activities determination and the provisions in this section of this code.

5.1.5. Calculation of energy savings factor

The energy savings factor must be calculated in accordance with section 5.1.4 of the eligible activities determination.

5.1.6. Recording and reporting

For this activity the following information must be recorded—

- (a) all required information in section 7.3 for periodic activity reporting and section 8.2 for compliance period reporting of the record keeping and reporting code of practice;
- (b) the Activity ID;
- (c) for each decommissioned product—
 - i. the brand name and model number, where ascertainable;
 - ii. the product type, being a one-door refrigerator or freezer, or a two-door refrigerator or freezer; and
 - iii. the year of manufacture of the product;
- (d) the number of each product type removed and decommissioned;
- (e) the authorised installer's refrigerant handling licence number issued under the *Ozone Protection and Synthetic Greenhouse Gas Management Act 1989* (Commonwealth);
- (f) documentary records demonstrating transfer and destruction or transfer and recycling of scheduled substances in accordance with the *Ozone Protection and Synthetic Greenhouse Gas Management Act 1989* (Commonwealth);
- (g) for multiple activity record forms, the authorised installer identifier of each installer that carried out the activity;
- (h) the type and certificate number of any statutory certification for the work or associated work; and
- (i) the energy savings factor for the activity calculated in accordance with section 5.1.5 of the eligible activities determination as in force at the time the activity was completed.

5.2. Purchase of high efficiency refrigerator or freezer

5.2.1. Application of this section

This section applies to undertaking Activity 5.2 – purchase of high efficiency refrigerator or freezer – as defined in section 5.2 of the eligible activities determination as—

In accordance with the prescribed minimum activity performance specifications, purchase for installation in a premises a high efficiency—

- (a) **Activity ID 5.2(a)** – single door refrigerator;
- (b) **Activity ID 5.2(b)** – two-door refrigerator;
- (c) **Activity ID 5.2(c)** – chest freezer; or
- (d) **Activity ID 5.2(d)** – upright freezer.

5.2.2. Competency requirements

A high efficiency refrigerator or freezer purchased for this activity must be sold by an authorised seller who has completed all required training prescribed in section A.4.

An authorised seller must also be trained in the other relevant competencies for undertaking the activity, including, but not limited to—

- (a) understanding the difference between eligible high efficiency refrigerators and freezers and other refrigerators and freezers; and
- (b) being familiar with standard terms and able to locate product information for a product as required to complete activity records, energy saving factor calculations and provide information to consumers, including for—
 - i. minimum size of eligible refrigerators and freezers;
 - ii. maximum size of eligible refrigerators and freezers;
 - iii. minimum star rating index of eligible refrigerators and freezers as determined in accordance with AS/NZS 4474; and
 - iv. determining whether products are on any product register for the activity.

5.2.3. Determining eligibility of premises

A premises is an eligible premises for Activity 5.2 if—

- (a) the premises is a residential or business premises as defined in the eligible activities determination; and
- (b) the product or products are purchased by a resident of the ACT.

Note The retailer can determine purchaser eligibility with a signed declaration from a purchaser that demonstrates their eligibility. A retailer is not required to sight photographic ID or rates notices.

5.2.4. Minimum activity performance specifications

The minimum specifications for the purchase of high efficiency refrigerator or freezer activities to be a compliant eligible activity are the minimum activity performance specifications in section 5.2.2 of the eligible activities determination and the provisions in this section of this code.

The installed product must meet the installed product requirements in section 5.2.3 of the eligible activities determination and have a minimum warranty period of two years.

5.2.5. Calculation of energy savings factor

The energy savings factor must be calculated in accordance with section 5.2.5 of the eligible activities determination.

Note *The energy savings factor can be calculated for each eligible refrigerator and freezer sold by a retailer prior to any sales.*

5.2.6. Recording and reporting

For this activity the following information must be recorded—

- (a) all required information in section 7.3 for periodic activity reporting and section 8.2 for compliance period reporting of the record keeping and reporting code of practice;
- (b) the Activity ID;
- (c) for each purchased product—
 - i. the brand name and model number;
 - ii. the product type, being a one-door refrigerator, a two-door refrigerator, a chest freezer or an upright freezer;
 - iii. the installed product group as defined by AS/NZS 4474, being 1, 4, 5B, 5S, 5T, 6C, 6U or 7;
 - iv. the product volume in litres; and
 - v. the star rating as determined in accordance with AS/NZS 4474;
- (d) for multiple activity record forms, the authorised seller identifier of the seller that sold the product;
- (e) the receipt number or transaction reference issued by the authorised seller;
- (f) a completed seller declaration; and
- (g) the energy savings factor for the activity calculated in accordance with section 5.2.5 of the eligible activities determination as in force at the time the activity was completed.

Note *Refrigerator and freezer group definitions at <http://www.energyrating.gov.au/products-themes/refrigeration/domestic-refrigeration/meps/>*

5.3. Purchase of high efficiency electric clothes dryer

5.3.1. Application of this section

This section applies to undertaking Activity 5.3 – purchase of high efficiency electric clothes dryer – as defined in section 5.3 of the eligible activities determination as—

Activity ID 5.3 – In accordance with the prescribed minimum activity performance specifications, purchase for installation in a premises a high efficiency electric clothes dryer.

5.3.2. Competency requirements

A high efficiency electric clothes dryer purchased for this activity must be sold by an authorised seller who has completed all required training prescribed in section A.4.

An authorised seller must also be trained in the other relevant competencies for undertaking the activity, including, but not limited to—

- (a) understanding the difference between eligible high efficiency electric clothes dryers and other electric clothes dryers; and
- (b) being familiar with standard terms and able to locate product information for a product as required to complete activity records, energy saving factor calculations and provide information to consumers, including for—
 - i. determining that an eligible electric clothes dryer is registered for energy labelling in accordance with AS/NZS 2442;
 - ii. determining that an eligible electric clothes dryer achieves a minimum energy efficiency rating of 7 stars when tested in accordance with AS/NZS 2442;
 - iii. determining that an eligible combination washer-dryer uses heat pump technology for drying and achieves a minimum efficiency rating of 6.5 stars when tested in accordance with AS/NZS 2442; and
 - iv. determining whether products are on any product register for the activity.

5.3.3. Determining eligibility of premises

A premises is an eligible premises for Activity 5.3 if—

- (a) the premises is a residential or business premises as defined in the eligible activities determination; and
- (b) the product or products are purchased by a resident of the ACT.

Note The retailer can determine purchaser eligibility with a signed declaration from a purchaser that demonstrates their eligibility. A retailer is not required to sight photographic ID or rates notices.

5.3.4. Minimum activity performance specifications

The minimum specifications for the purchase of high efficiency electric clothes dryer activities to be a compliant eligible activity are the minimum activity performance specifications in section 5.3.2 of the eligible activities determination and the provisions in this section of this code.

The installed product must meet the installed product requirements in section 5.3.3 of the eligible activities determination and have a minimum warranty period of two years.

5.3.5. Calculation of energy savings factor

The energy savings factor must be calculated in accordance with section 5.3.5 of the eligible activities determination.

Note The energy savings factor can be calculated for each eligible electric clothes dryer sold by a retailer prior to any sales.

5.3.6. Recording and reporting

For this activity the following information must be recorded—

- (a) all required information in section 7.3 for periodic activity reporting and section 8.2 for compliance period reporting of the record keeping and reporting code of practice;
- (b) the Activity ID;
- (c) the brand name and model number of the product;
- (d) the star rating of the product as determined in accordance with AS/NZS 2442;
- (e) the rated capacity of the product, as measured in kilograms and defined by AS/NZS 2442;
- (f) the comparative energy consumption (CEC) measured in kilowatt hours per year (kWh/y) specified on the energy rating label as defined by AS/NZS 2442;
- (g) the receipt number or transaction reference issued by the authorised seller;
- (h) for multiple activity record forms, the authorised seller identifier of the seller that sold the product;
- (i) completed seller declaration; and
- (j) the energy savings factor for the activity calculated in accordance with section 5.3.5 of the eligible activities determination as in force at the time the activity was completed.

5.4. Purchase of high efficiency television

5.4.1. Application of this section

This section applies to undertaking Activity 5.4 – purchase of high efficiency television – as defined in section 5.4 of the eligible activities determination as—

Activity ID 5.4 – In accordance with the prescribed minimum activity performance specifications, purchase for installation in a premises a high efficiency television.

5.4.2. Competency requirements

A high efficiency television purchased for this activity must be sold by an authorised seller who has completed all required training prescribed in section A.4.

An authorised seller must also be trained in the other relevant competencies for undertaking the activity, including, but not limited to—

- (a) understanding the difference between eligible high efficiency televisions and other televisions;
- (b) being familiar with standard terms and able to locate product information for a product as required to complete activity records, energy saving factor calculations and provide information to consumers, including for—
 - i. determining that a television is registered for energy labelling in accordance with AS/NZS 62087; and
 - ii. determining that a television has a minimum star rating of 6.5 stars as determined in accordance with AS/NZS 62087.

5.4.3. Determining eligibility of premises

A premises is an eligible premises for Activity 5.4 if—

- (a) the premises is a residential or business premises as defined in the eligible activities determination; and
- (b) the product or products are purchased by a resident of the ACT.

Note The retailer can determine purchaser eligibility with a signed declaration from a purchaser that demonstrates their eligibility. A retailer is not required to sight photographic ID or rates notices.

5.4.4. Minimum activity performance specifications

The minimum specifications for the purchase of high efficiency television activities to be a compliant eligible activity are the minimum activity performance specifications in section 5.4.2 of the eligible activities determination and the provisions in this section of this code.

The installed product must meet the installed product requirements in section 5.4.3 of the eligible activities determination and have a minimum warranty period of two years.

5.4.5. Calculation of energy savings factor

The energy savings factor must be calculated in accordance with section 5.4.5 of the eligible activities determination.

Note The energy savings factor can be calculated for each eligible television sold by a retailer prior to any sales.

5.4.6. Recording and reporting

For this activity the following information must be recorded—

- (a) all required information in section 7.3 for periodic activity reporting and section 8.2 for compliance period reporting of the record keeping and reporting code of practice;
- (b) the Activity ID;
- (c) for each purchased product—
 - i. the brand name and model number of the product;
 - ii. the product star rating as determined in accordance with AS/NZS 62087;
 - iii. the rated capacity, as measured in kilograms and defined by AS/NZS 2442;
 - iv. the comparative energy consumption (CEC) in kWh/y specified on the energy rating label as defined by AS/NZS 62087; and
 - v. the screen area in square centimetres as defined in AS/NZS 62087;
- (d) for multiple activity record forms, the authorised installer identifier of each installer that carried out the activity;
- (e) a completed seller declaration;
- (f) the receipt number or transaction reference issued by the authorised seller; and
- (g) the energy savings factor for the activity, including subtotals for each product type, calculated in accordance with section 5.4.5 of the eligible activities determination as in force at the time the activity was completed.

5.5. Install a standby power controller (*Revoked*)

5.6. Install a high efficiency swimming pool pump

5.6.1. Application of this section

This section applies to undertaking Activity 5.6 – installation of a high efficiency swimming pool pump – as defined in section 5.6 of the eligible activities determination as—

Activity ID 5.6 – In accordance with the prescribed minimum activity performance specifications, install a high efficiency pool pump with a minimum energy efficiency rating (**star rating**) of 7 to a swimming pool or spa in a residential or eligible business premises.

5.6.2. Competency requirements

5.6.2.1. Installer competency requirements

Activity 5.6 must be carried out by an authorised installer who—

- (a) is the holder of an electrician's licence that is an unrestricted licence issued under the *Construction Occupations (Licensing) Act 2004*;
- (b) is the holder of a General Construction Induction card;
- (c) has completed all required training prescribed in section A.4; and
- (d) is an authorised installer for activity 5.6 Install a high efficiency swimming pool pump.

5.6.2.2. Other installer competencies

An authorised installer must also be trained in the other relevant competencies for undertaking the activity, including, but not limited to—

- (a) determining that a pool pump is a single phase, single speed, dual speed, multiple speed or variable speed pump unit with an input power of not less than 100W and not more than 2500W when tested in accordance with AS 5102;
- (b) determining that for pool pumps installed from 2018 calendar year, pool pump controllers shall comply with AS 4755 *Demand response capabilities and supporting technologies for electrical products - Interaction of demand response enabling devices and electrical products - Operational instructions and connections for devices controlling swimming pool pump-units*;
- (c) determining that a pool pump is listed as part of a labelling scheme determined in accordance with the Equipment Energy Efficiency (E3) Committee's *Voluntary Energy Rating Labelling Program for Swimming Pool Pump-units: Rules for Participation*, April 2010, and achieves a minimum energy efficiency rating of 7 stars when determined in accordance with AS 5102;
- (d) determining that a pool pump is registered for energy labelling and achieves a minimum 7 star rating when determined in accordance with AS 5102;
- (e) installing, commissioning and testing a high efficiency swimming pool pump in accordance with the *Electricity Safety Act 1971* and AS/NZS 3000; and
- (f) explaining the use, operation and safety requirements of an installed product.

5.6.3. Determining eligibility of premises

A premises is an eligible premises for Activity 5.6 if the premises is a residential or business premises as defined in the eligible activities determination.

5.6.4. Minimum activity performance specifications

The minimum specifications for installation of high efficiency swimming pool pump activities to be a compliant eligible activity are the minimum activity performance specifications in section 5.6.2 of the eligible activities determination and the provisions in this section of this code.

The installed product must meet the installed product requirements in section 5.6.3 of the eligible activities determination and have a minimum warranty period of two years.

A high efficiency swimming pool pump must be installed and commissioned in accordance with the *Electricity Safety Act 1971* and AS/NZS 3000.

Note Bonded asbestos products are found on many residential and commercial buildings. These materials can become friable with age and pose additional risks requiring management controls beyond the scope of this code. If friable asbestos is found, risk treatment steps described in section A5.5 should be followed.

5.6.5. Calculation of energy savings factor

The energy savings factor must be calculated in accordance with section 5.6.5 of the eligible activities determination.

Note The energy savings factor can be calculated for each high efficiency swimming pool pump sold by a retailer prior to any sales.

5.6.6. Recording and reporting

For this activity the following information must be recorded—

- (a) all required information in section 7.3 for periodic activity reporting and section 8.2 for compliance period reporting of the record keeping and reporting code of practice;
- (b) the Activity ID;
- (c) for each installed product—
 - i. the brand name, model number and serial number;
 - ii. the product input power when tested in accordance with AS 5102;
 - iii. the star rating determined in accordance with AS 5102;
 - iv. the projected annual energy consumption (PEAC) in kWh/y listed on the energy rating label and the product register; and
 - v. the number of units installed;
- (d) for multiple activity record forms, the authorised installer identifier of each installer that carried out the activity;
- (e) for electrical work, the number of the relevant certificate of electrical safety completed for the work in accordance with the *Electricity Safety Act 1971*;
- (f) the submission date of the certificate of electrical safety;
- (g) the type and certificate number of any other statutory certification for the work or associated work;
- (h) the licence or registration number (however described), if applicable, of each person who provided a statutory certification;
- (i) a completed seller declaration; and
- (j) the energy savings factor for the activity, including subtotals for each product type, calculated in accordance with section 5.6.5 of the eligible activities determination as in force at the time the activity was completed.

5.7. High efficiency refrigerated display cabinet activities

5.7.1. Application of this section

This section applies to undertaking Activity 5.7 – installation of a high efficiency refrigerated display cabinet – as defined in section 5.7 of the eligible activities determination as—

Activity ID 5.7 – In accordance with the prescribed minimum activity performance specifications, installing a refrigerated display cabinet that is rated as 'high efficiency' within the meaning of the AS 1731 series of standards.

5.7.2. Competency requirements

5.7.2.1. Installer competency requirements

Activity 5.7 must be carried out by an authorised installer who—

- (a) where electrical wiring is involved, the authorised installer holds of an unrestricted electrician licence issued under the *Construction Occupations (Licensing) Act 2004*;
- (b) where refrigerant gases are required to be installed and/or recovered, the authorised installer is a licensed technician for the handling of refrigerant gases with the Australian Refrigeration Council (Licence Type: RAC01);
- (c) where installing remote type refrigerated display cabinets, the authorised installer is a licensed technician for the handling of refrigerant gases with the Australian Refrigeration Council (Licence Type: RAC01);
- (d) is the holder of a General Construction Induction card; and
- (e) has completed all required training prescribed in section A.4.

5.7.2.2. Other installer competencies

An authorised installer must also be trained in the other relevant competencies for undertaking the activity, including, but not limited to—

- (a) understanding the difference between eligible high efficiency refrigerated display cabinets and other refrigerated display cabinets;
- (b) being familiar with standard terms and able to locate product information for a product as required to complete activity records, energy saving factor calculations and provide information to consumers, including for—
 - i. determining the refrigerated display cabinet type and sub-class as defined in the AS 1731 series of standards;
 - ii. determining the refrigerated display cabinet total display area (TDA) as defined in the AS 1731 series of standards;
 - iii. determining the refrigerated display cabinets M-package temperature class as defined in the AS 1731 series of standards; and
 - iv. determining whether products are on any product register for the activity; and
- (c) installing, commissioning and testing refrigerated display cabinet in accordance with the *Electricity Safety Act 1971* and AS/NZS 3000;
- (d) providing a test report for systems as defined in the AS 1731 series of standards; and
- (e) explaining the use, operation and safety requirements of an installed product.

5.7.3. Determining eligibility of premises

A premises is an eligible premises for Activity 5.7 if it is a business premises as defined in the eligible activities determination.

5.7.4. Minimum activity performance specifications

The minimum specifications for installation of high efficiency refrigerated display cabinet activities to be a compliant eligible activity are the minimum activity performance specifications in section 5.7.2 of the eligible activities determination and the provisions in this section of this code.

In addition—

- (a) the installed product must meet the installed product requirements in section 5.7.3 of the eligible activities determination and have a minimum warranty period of two years;
- (b) a high efficiency refrigerated display cabinet must be installed and commissioned in accordance with the *Electricity Safety Act 1971* and AS/NZS 3000;
- (c) a high efficiency refrigerated display cabinet must be tested in accordance with the AS 1731 series of standards; and
- (d) refrigerants where used must be used in accordance with any relevant law, including but not limited to the *Ozone Protection and Synthetic Greenhouse Gas Management Act 1989* (Commonwealth) and *The Australian Refrigerant Handling Code of Practice 2007*.

Note Refer to the Australian Institute of Refrigeration, Air Conditioning and Heating *Flammable Refrigerants Safety Guide* for further explanation on managing the health and safety risks associated with refrigeration equipment and systems that use a flammable refrigerant (http://www.airah.org.au/imis15_prod/Content_Files/TechnicalPublications/Flammable-Refrigerant-Safety-Guide-2013.pdf).

5.7.5. Calculation of energy savings factor

The energy savings factor must be calculated in accordance with section 5.7.5 of the eligible activities determination.

5.7.6. Recording and reporting

For this activity the following information must be recorded—

- (a) all required information in section 7.3 for periodic activity reporting and section 8.2 for compliance period reporting of the record keeping and reporting code of practice;
- (b) the Activity ID;
- (c) for each installed product—
 - i. the brand name and model number;
 - ii. the product type and sub-class as defined in the AS 1731 series of standards;
 - iii. the product total display area as defined in the AS 1731 series of standards;
 - iv. the product M-package temperature class or classes as defined in the AS 1731 series of standards;
 - v. the product GEMS energy efficiency registration number, which can be located at http://reg.energyrating.gov.au/comparator/product_types/37/search;
 - vi. the number of units installed; and
 - vii. a test report for systems as defined in the AS 1731 series of standards;
- (d) for multiple activity record forms, the authorised installer identifier of each installer that carried out the activity;

- (e) for electrical work, the number of the relevant certificate of electrical safety completed for the work in accordance with the *Electricity Safety Act 1971*;
- (f) the type and certificate number of any other statutory certification for the work or associated work;
- (g) the licence or registration number (however described), if applicable, of each person who provided a statutory certification; and
- (h) the energy savings factor for the activity, including subtotals for each product type, calculated in accordance with section 5.7.5 of the eligible activities determination as in force at the time the activity was completed.

SECTION C: DICTIONARY

Note 1 Other terms may apply to this code. Terms not defined in this dictionary but defined in associated legislation have the same meaning as in that legislation unless it is evident a contrary meaning is intended.

Note 2 The Legislation Act, the Energy Efficiency (Cost of Living) Act 2012, the Energy Efficiency (Cost of Living) Improvement (Eligible Activities) Determination, the Building Act 2004, the Construction Occupations (Licensing) Act 2004, the Gas Safety Act 2000, the Electricity Safety Act 1971, and the Water and Sewerage Act 2000 may contain definitions and other provisions relevant to this code.

Active State, in relation to a computer, means a state in which the computer is carrying out useful work in response to prior or concurrent—

- (a) user input; or
- (b) instruction over a network.

activity means an eligible activity as determined by the Minister under section 10 of the *Energy Efficiency (Cost of Living) Improvement Act 2012*.

activity certification means the certification prepared by a person or people involved in carrying out an activity declaring compliance with relevant activity eligibility requirements and includes any statutory certifications required under another law of the Territory, and documents and evidence prescribed in section B of this code.

activity item, in relation to eligible activities, means one of a number of options for an installation or of product type that may be permitted under the activity definition to undertake and complete an eligible activity.

activity item unit means the unit of measurement for the number of units installed used to calculate the energy savings factor for an activity item, and includes square metres, length in metres, number of products and the like.

activity record— see section 5 of the *Energy Efficiency (Cost of Living) Improvement (Record Keeping and Reporting) Code of Practice*.

activity record form— see section 5 of the *Energy Efficiency (Cost of Living) Improvement (Record Keeping and Reporting) Code of Practice*.

administrator means the person appointed as the administrator by the Minister under section 23 of the *Energy Efficiency (Cost of Living) Improvement Act 2012*.

affected residential premises register— see section 47N (1) of the *Dangerous Substances Act 2004*.

agent means an entity with demonstrable authority to create or affect legal relations between the appointing entity and an independent third party.

appropriate person means a person with demonstrable authority to create or affect legal relations on behalf of a consumer occupying a business premises between that consumer and the retailer or their agent.

approved code of practice means a code of practice approved by the administrator under section 25 of the Act.

approved product energy savings value means an energy savings value approved by the administrator for a particular product model (expressed in MWh), which may be used to calculate the energy savings factor for an eligible activity.

associated work in relation to eligible activities means work required to complete the installation other than work within the standard scope of the activity including, but not limited to, electrical wiring work, plumbing work, gas fitting work, building work, asbestos assessment and removal, and handling of dangerous goods.

AS 1288 means the relevant parts of Australian Standard 1288 as in force from time to time.

AS 1530 means the relevant parts of Australian Standard 1530 as in force from time to time.

AS 1731 means the relevant parts of Australian Standard 1731 (parts 1 – 14) as in force from time to time.

AS 2047 means the relevant parts of Australian Standard 2047 as in force from time to time.

AS 2293 means the relevant parts of Australian Standard 2293 as in force from time to time.

AS 3498 means the relevant parts of Australian Standard 3498 as in force from time to time.

AS 3999 means the relevant parts of Australian Standard 3999 as in force from time to time.

AS 4254 means the relevant parts of Australian Standard 4254 as in force from time to time.

AS 4474 means the relevant parts of Australian Standard 4474 as in force from time to time.

AS 4755 means the relevant parts of Australian Standard 4755 as in force from time to time.

AS 5102 means the relevant parts of Australian Standard 5102 as in force from time to time.

AS/NZS 1680 means the relevant parts of Australian/New Zealand Standard 1680 as in force from time to time.

AS/NZS 2442 means the relevant parts of Australian/New Zealand Standard 2442 as in force from time to time.

AS/NZS 3000 means the relevant parts of Australian/New Zealand Standard 3000 as in force from time to time.

AS/NZS 4552 means the relevant parts of Australian/New Zealand Standard 4552 as in force from time to time.

AS/NZS 5263 means the relevant parts of Australian/New Zealand Standard 5263 as in force from time to time.

AS/NZS 5601 means the relevant parts of Australian/New Zealand Standard 5601 as in force from time to time.

AS/NZS 6400 means Australian/New Zealand Standard 6400 as in force from time to time.

AS/NZS 62087 means the relevant parts of Australian/New Zealand Standard 62087 as in force from time to time.

Australian Business Number means the current Australian Business Number as issued by the Australian Business Register.

Australian Standard ISO 10002-2006 means Australian Standard ISO 10002-2006 *Customer satisfaction—Guidelines for complaints handling in organisations* (ISO 10002:2004, MOD) as in force from time to time.

authorised contractor means an entity that is directly contracted or otherwise authorised by a retailer to provide or arrange the undertaking of eligible activities, but is not an employee of the retailer.

authorised installer means an individual, whether an employee of, or under direct contract to, a retailer or an authorised contractor, who undertakes an eligible activity on behalf of a retailer, including the physical installation of products.

authorised seller means a business entity that, under contract or by other direct arrangement with a retailer or an authorised contractor, undertakes an eligible activity that specifically refers to the purchase of a compliant product but does not require the installation of the product for the activity to be considered complete.

air sealing means sealing of openings between materials in a building to minimise air leakage from and air infiltration between rooms in a building, but not necessarily to exclude rain or other effects of weather.

building code means the ACT building code, which is comprised of Volumes 1 and 2 of the National Construction Code published by the Australian Building Codes Board and the ACT Appendix to the building code as determined by the responsible Minister.

building lighting has the same meaning as in the ESS Rule section 10.

building sealing means weather sealing or air sealing.

building work— see section 6 of the *Building Act 2004*.

business premises means an existing commercial premises that—

- (a) is not a residential premises; and
- (b) qualifies as a National Construction Code class 3, 5, 6, 7, 8, 9, 10 or the common areas of class 2.

Note 1 A business premises may be occupied by a business, not-for-profit organisation or other enterprise.

Note 2 A business premises may represent part of a larger building.

code of practice means a code of practice made by the administrator under section 25 (Codes of practice) of the *Energy Efficiency (Cost of Living) Improvement Act 2012* that may address consumer protection obligations, quality, health, safety and environmental requirements, record keeping requirements and reporting requirements for eligible activities.

combustible – applied to a material – means combustible under AS 1530 *Methods for fire tests on building materials, components and structures*, as per the definition in the NCC Building Code of Australia – Volume 2 Part 1.1.

commercial lease means a commercial lease agreement for a commercial or business premises as per the *Leases (Commercial and Retail) Act 2001*.

commercial lighting means the lighting equipment affixed to commercial premises that are classified under the National Construction Code as either Class 3, 5, 6, 7, 8, 9, 10 or the common areas of a Class 2 building.

common property— see section 13 of the *Unit Titles Act 2001*.

compliance period report means the compilation of all information in relation to a compliance period a retailer is required to give to the administrator under section 19 of the Act and prepared in accordance with part 8 of the effective version of the *Energy Efficiency (Cost of Living) Improvement (Record Keeping and Reporting) Code of Practice*.

conditioned zone means a room or rooms in premises that due to their use is capable of being fully enclosed and is likely to be artificially heated and/or cooled. Conditioned zones include, but are not limited to, habitable rooms, internal corridors and utility rooms without direct natural ventilation to the room such as an ensuite bathroom.

Note A large wall furnace or fixed electric resistance heater may be installed in a corridor to provide heating to adjacent rooms. This heating works by providing more heating than is required in the corridor, causing the excess heat to enter habitable rooms.

construction work has the same meaning as in the *Work Health and Safety Act 2011*.

consumer means the occupier of the premises to which the activity relates.

control gear means lighting ballasts, transformers or drivers.

date of completion means the date the activity is taken to be completed as defined under the relevant section for the activity in the *Energy Efficiency (Cost of Living) Improvement (Eligible Activities) Determination 2020*.

decommission means disable and render permanently unusable.

Do Not Call Register means the Do Not Call Register managed by the Australian Communications and Media Authority.

electric resistance water heater means a hot water heater using an electric resistance element to heat the water in a storage tank.

electrical wiring work has the same meaning as in the *Electricity Safety Act 1971*.

eligible activities determination means the *Energy Efficiency (Cost of Living) Improvement (Eligible Activities) Determination* as in force from time to time

eligible business premises means an existing business premises—

- (a) for which the energy consumption is not included in a reporting obligation under of any of the following;
 - i. the National Greenhouse and Energy Reporting Act 2007 (Commonwealth);
 - ii. the Australian Government's Energy Efficiency in Government Operations Policy; or
 - iii. the Carbon Neutral ACT Government Framework; and
- (b) is not undergoing development or refurbishment under an existing development approval under the *ACT Planning and Development Act 2007*. The exception is when a development approval is required for undertaking an eligible activity in an existing building.

eligible residential premises means an existing residential premises—

- (a) located in the Territory that meets all criteria for an eligible activity and is not excluded by another law of the Territory, or by the failure to obtain a required approval for any part of the activity, from the activity being undertaken at the premises; and
 - (b) that is not undergoing development or refurbishment under an existing development approval under the *ACT Planning and Development Act 2007*. The exception is when a development approval is required for undertaking an eligible activity in an existing building.
- (c) **Energy savings factor** means the number of Megawatt-hours (MWh) that an eligible activity is taken to save. The method for calculating the energy savings factor for each eligible activity is outlined for each eligible activity in the *Energy Efficiency (Cost of Living) Improvement (Eligible Activities) Determination* as in force from time to time.

Energy Savings Scheme refers to the NSW Government's energy efficiency obligation scheme. Specifically it is defined and has the same meaning as in part 9 of the *Electricity Supply Act 1995 (NSW)*.

ESS Administrator has the same meaning as Scheme Administrator in part 9 of the *Electricity Supply Act 1995 (NSW)*.

ESS Rule has the same meaning as Scheme Rule in part 9 of the *Electricity Supply Act 1995 (NSW)*.

entity— see entities as defined in the *Corporations Act 2001*.

excessive lighting for residential buildings is as defined by the National Construction Code – Clause 3.12.5.5 *Artificial lighting* where—

the lamp power density of artificial lighting must not exceed—

- 5 watts/m² for internal areas;
- 4 watts/m² for exterior areas such as a verandah or balcony; and
- 3 watts/m² for garages.

external wall means an outer wall of a building other than a wall separating or common to adjoining buildings.

flueless gas appliance— includes gas cooktops.

Gas fitting work— see the dictionary of the *Gas Safety Act 2000*.

General Construction Induction Card has the same meaning as in the *Work Health and Safety Act 2011*.

glazing means a transparent or translucent element and its supporting frame located in an external wall of a building, and includes a window other than a roof light.

habitable room— see section 1.1.1 Definitions in Volume 2 *National Construction Code Class 1 and Class 10 Buildings* of the National Construction Code Series.

IEC/TR 61341 Edition 2.0 means the *Method of measurement of centre beam intensity and beam angle(s) of reflector lamps Edition 2.0 2010-02*, published by the International Electrotechnical Commission on 18 February 2010.

illumination power density refers to the number of watts produced by lighting per square metre.

Implementation date means the date on which—

- (a) for an eligible activity that requires an authorised installer, the physical installation or implementation of an activity is undertaken at the eligible business premises or eligible residential premises; or
- (b) for an eligible activity that does not require an authorised installer, the receipt of a product from an authorised seller for installation into an eligible business premises or eligible residential premises occurs.

in association, in relation to work or other eligible activities undertaken in a premises, includes at the same time as, or subsequent to alterations and additions to a premises, or part of a premises, or as a result of an eligible activity, or as part of the same contract with a lessee or occupier of a premises.

indication means a mark such as a cross, a tick in a check box, an abbreviation, a number, text or the like included on a document signifying a particular fact or piece of information.

install includes modify or replace to achieve compliance with eligible activity criteria.

installed products means the products installed to meet the installed product requirement relevant to the eligible activity.

installer means a person physically installing a product as part of an eligible activity in a consumer's residence on the behalf of a NERL retailer for the purposes of the NERL retailer complying with the *Energy Efficiency (Cost of Living) Improvement Act 2012*.

K means Kelvins.

kW means kilowatt.

lamp waste means decommissioned lamps, possibly integrated into a luminaire.

large electricity customer means a business which consumes electricity at or above the upper consumption threshold for electricity.

Note The upper consumption threshold for large electricity users is more than 160MWh per annum per National Meter Identifier in the 12 months prior to upgrade.

lessee— see section 234 of the *Planning and Development Act 2007*.

lessor— see section 5 of the *Residential Tenancies Act 1997*.

licensed, in relation to undertaking work involved in undertaking eligible activities means, licensed, registered or accredited under a relevant law where that licence, registration or accreditation is not lapsed, suspended, cancelled or conditioned so that the work cannot be undertaken by the entity holding the licence.

licensed electrician means a person who is the holder of an electrician's licence that is an unrestricted licence issued under the *Construction Occupations (Licensing) Act 2004*.

licensed gas fitter means a person who is the holder of a gas fitter's licence that is a general or advanced licence issued under the *Construction Occupations (Licensing) Act 2004*.

licensed plumber means a person who is the holder of a water supply plumber licence issued under the *Construction Occupations (Licensing) Act 2004*.

lighting source efficacy means the initial luminous flux of a lamp or the total radiant flux in the visible spectrum weighted by the spectral response of the eye, divided by the electric power that will be consumed by the lamp but excluding ballast and control gear power losses.

Lm/W means lumens per watt.

LPG means liquefied petroleum gas.

mains power switching device means a relay or other device that switches the power to the controlled appliances on or off.

manual dimmer means a product that enables manual control of a light fitting's light output by a dial, slider or other mechanism.

master/slave arrangement, in relation to a standby power controller, means an arrangement where the standby power controller is connected to an uncontrolled master appliance, whose current or power is solely used to control the electrical input to controlled appliances connected to the standby power controller.

MEPS means a minimum energy performance standard.

MJ means megajoules.

modified linear LED tube installations means modification style installations are those where the existing linear fluorescent lamp is replaced with a linear LED lamp, the original starter is replaced with a fuse as supplied with the LED lamp (in accordance with instructions provided with the LED lamp) and the original fluorescent lamp control gear – including both the ballast and capacitor where fitted – is rendered inoperable by removal and destruction of the whole item.

M-package temperature class means the operational temperature range for the refrigerated display cabinet as defined in AS 1731.

multiple activity record form means a form that contains more than one activity record for eligible activities.

MWh means megawatt hours.

National Construction Code means Volumes 1 and 2 of the National Construction Code published by the Australian Building Codes Board and the ACT Appendix to the building code as determined by the responsible Minister.

natural person means a human being.

NERL retailer means a person who holds a retailer authorisation under the *National Energy Retail Law (ACT)* to sell electricity to premises in the ACT for consumption.

occupier of premises, includes—

- (a) a person believed, on reasonable grounds, to be an occupier of the premises; and
- (b) a person apparently in charge of the premises.

Off Mode, in relation to a computer, means the lowest power state, of the computer when the computer is switched off by the user, but does not include Sleep Mode.

plumbing work— see sanitary plumbing work and water supply plumbing work as defined in the dictionary of the *Water and Sewerage Act 2000*.

prescribed activity requirement means a requirement for an eligible activity that must be completed or complied with and includes an action, a product specification, a manner of carrying out a particular task and a resultant performance of an installation.

primary reporting contact means an individual nominated by a retailer as the main contact for the administrator in relation to the record keeping and reporting requirements under the Act and this code.

priority household means residential premises in which one person who lives at the premises—

- (a) is a recipient of an ACT Government energy concession;
- (b) holds a Commonwealth pensioner concession card or health care card; or

- (c) holds a Department of Veterans Affairs pensioner concession card, TPI gold repatriation health care card, war widows repatriation health care card, or gold repatriation health care card.

The following additional classes are prescribed in the *Energy Efficiency (Cost of Living) Improvement Regulation 2017*—

- (a) holders of a Commonwealth seniors health card;
- (b) holders of a Commonwealth low income health care card;
- (c) recipient of a Commonwealth disability support pension;
- (d) people accessing an energy retailer's financial hardship program;
- (e) people referred to a NERL retailer by a referring organisation for access to eligible activities carried out by the retailer; or
- (f) people living in a priority dwelling.

product includes an appliance, equipment and material.

product warranty means a warranty provided by the product manufacturer or other product supplier.

purchase does not include by private sale.

record includes report on all or certain criteria of an eligible activity where an obligation to report exists.

refrigerated display cabinet has the same meaning as in AS 1731.

register of products, in relation to an eligible activity, means a register of products that meet one or more of the installed product requirements and product testing criteria for the activity that is prescribed by the administrator under a relevant code of practice and provided to NERL retailers with an energy savings obligation under the Act. The register of products includes those available under the Victorian Energy Efficiency Target (VEET), or the NSW Energy Savings Scheme (ESS), or in the *Greenhouse and Energy Minimum Standards Act 2012* (GEMS). If a product is suspended by either GEMS, the VEET or ESS product register then that product is no longer eligible to be used in the Energy Efficiency Improvement Scheme (EEIS).

relevant authority see section A.3.7 of this code.

relevant legislation means a law of the Territory or another jurisdiction that applies to all or part of the activity being undertaken, including but not limited to, the—

- *Building Act 2004*;
- *Gas Safety Act 2000*;
- *Electricity Safety Act 1971*;
- *Electronic Transactions Act 2001*;
- *Water and Sewerage Act 2000*;
- *Dangerous Substances Act 2004*;
- *Work Health and Safety Act 2011*;
- *Unit Titles Act 2001*;
- *Fair Trading Act (Australia Consumer Law) Act 1992*;
- *Environment Protection Act 1997*;
- *Construction Occupations (Licensing) Act 2004*;
- *Ozone Protection and Synthetic Greenhouse Gas Management Act 1989* (Commonwealth);

- *Planning and Development Act 2007*;
- *Consumer and Competition Act 2010* (Commonwealth).

representative, in relation to a retailer, means an entity contracted, employed or otherwise engaged by the retailer to arrange or undertake an eligible activity, or a prescribed activity requirement.

residential tenancy means a tenancy agreement as defined in the *Residential Tenancies Act 1997*.

resident of the ACT, in relation to eligible activities that require the purchase of certain products from an authorised seller, means a person who resides in a residential premises, or a lessee of a residential premises located in the ACT.

residential premises means as a building or part of building located in the Australian Capital Territory and classified under Part A3 of the National Construction Code as a class 1 building, a class 10a building associated with a class 1 building, a sole occupancy unit in a class 2 building, or a class 4 building, or is a transportable home or vehicle designed for habitation that is not used for short-stay or holiday accommodation.

residual current detector (RCD) means a device which disconnects current to prevent risk of an electric shock. RCDs monitor the flow of electricity from the main switchboard and prevent electrocution by cutting the electricity supply if an imbalance in the current is detected.

retailer— see *NERL retailer*.

R-value means the thermal resistance in m²K/W of a component calculated by dividing its thickness by its specific ability to conduct heat thermal conductivity.

Sleep Mode, in relation to a computer, means a low power state that the computer is capable of entering automatically after a period of inactivity or by manual selection.

small electricity customer means a business who consumes electricity below the upper consumption threshold for electricity.

Note A small electricity customer uses less than 160MWh per annum per National Meter Identifier in the 12 months prior to upgrade.

statutory warranty, in relation to a product, means the warranty provided for in the Australian Consumer Law.

the Act means the *Energy Efficiency (Cost of Living) Improvement Act 2012* as in force from time to time.

tier 1 retailer— see dictionary, *Energy Efficiency (Cost of Living) Improvement Act 2012*.

tier 2 retailer— see dictionary, *Energy Efficiency (Cost of Living) Improvement Act 2012*.

Total Display Area (TDA) means the area as defined in AS 1731 and AS 1731, Appendix D.

unconditioned zone means a room or rooms in a premises that is not a conditioned zone. Unconditioned zones include unheated bathrooms with direct natural ventilation and unheated laundry rooms with direct natural ventilation

unsealed, in relation to a door, door frame, window, window frame, exhaust fan, or chimney or flue to a solid fuel burning appliance, means not sealed in accordance with the relevant building sealing provisions of the building code for the class of building and may include partially sealed frames and/or sealing that is in a condition that renders the sealing ineffective.

weather sealing means sealing of openings between elements in a building to minimise air leakage from and air infiltration from the outside of a building and the inside of a building and to weatherproof the building to prevent the ingress of precipitation.

window includes a glass panel, glass block, glass brick, glazed sash, or similar glazing product that, when closed, transmits natural light directly from outside a premises to the inside

of the premises, but does not include a louvred product, and includes a door in an external wall that has a glazing pane or panes that comprise 60 per cent or more of the door.

working day means a day that is not a Saturday, a Sunday or a public holiday in the Australian Capital Territory.