ESSENTIAL SERVICES COMMISSION

Victorian Energy Upgrades

Space Conditioning, Shower Rose and Incandescent Lighting Activity Guide

31 January 2023

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Contents

Introduction

Accredited persons (APs) and their installers under the Victorian Energy Upgrades (VEU) program must comply with program requirements when undertaking space conditioning, shower rose and incandescent lighting activities to create Victorian energy efficiency certificates (VEECs).

About this guide

Use this guide for assistance meeting the specific requirements (product, installation, decommissioning, training, safety and evidentiary) of space conditioning, shower rose and incandescent lighting activities. We have split the guide into four key sections:

- Section 1: Introduction to space conditioning, shower rose and incandescent lighting activities
- Section 2: Requirements for space conditioning activities
- Section 3: Requirements for shower rose activities
- Section 4: Requirements for incandescent lighting activities

This document must be read in conjunction with our Obligations and Program Guide for Accredited Persons which provides you with:

- overarching information about the VEU program,
- your obligations under the program
- guidance on how to create Victorian energy efficiency certificates (VEECs) under the program.

Access this document at www.esc.vic.gov.au/veu-accredited-persons

Who should use this guide

You should use this guide if you are:

- seeking accreditation to undertake space conditioning, shower rose and/or incandescent lighting activities under the program
- accredited to undertake these activities under the program
- an installer seeking to undertake installations for these activities under the program.

This guide will help you to understand the activity, your responsibilities and evidentiary requirements you must meet to create and register VEECs.

To apply to become accredited for this activity, access the required documents from www.esc.vic.gov.au/become-veu-accredited

Legal context for this guide

We have prepared this guide as a general summary of relevant parts of:

- Victorian Energy Efficiency Target Act 2007 (the VEET Act)
- Victorian Energy Efficiency Target Regulations 2018 (the VEET Regulations)
- Victorian Energy Upgrades Specifications 2018 (the VEU specifications)
- Victorian Energy Efficiency Target Guidelines (the VEET guidelines)

View these documents at www.esc.vic.gov.au/veu-legislation

This guide should not be relied upon as substitute for legal advice and should be read in conjunction with the above source documents. In the event of inconsistency between this guide and the source documents, the content in the source documents apply.

1. Introduction to space conditioning, shower rose and incandescent lighting activities

1.1. Space conditioning activities

The following activities are covered by the space conditioning category:

- Activity 12: Underfloor insulation
- Activity 13: Double glazed window
- Activity 14: Thermally efficient window product
- Activity 15: Weather sealing – there are eight distinct scenarios (15A to 15H) available under this activity.

1.2. Incandescent lighting activities

VEECs will not be able to be created for incandescent lighting (activity 21) upgrades undertaken after 31 January 2023 following the removal of this activity from the VEU program (see VEU Specifications – Version 14.0)

The following activities are covered by this activity category:

- Activity 21A: Incandescent GLS or CFL replacement
- Activity 21B: Incandescent reflector lamp replacement
- Activity 21C: 12V halogen lamp replacement
- Activity 21D: 12V downlight and transformer replacement
- Activity 21E: Mains voltage GU10 halogen lamp replaced with GU10 lamp
- Activity 21F: Mains voltage GU10 downlight replaced with integrated downlight

1.2.1. Meeting EPA's waste management requirements

From 1 July 2021, every person must comply with the new Environment Protection Authority's framework. Chapter 6 of the EPA Act establishes a new waste framework including duties in relation to industrial and priority waste. Lighting waste is covered by the definition of e-waste which is classified as a priority waste under the EPA Act. Therefore, lighting waste attracts the priority duties under sections 139 and 140 of the EPA Act – which include a duty to contain the waste, isolate the waste, consider alternatives to landfill, and ensuring that the receiver of the waste is authorised to do so.

1.2.2. Meeting your recycling requirements for mercury-containing equipment under VEU program

If your activity involves the decommissioning of mercury containing equipment, you must dispose of that equipment prior to certificate creation in the waste disposal facility set out in Table 1 below.

Table 1: Eligible disposal facilities for mercury-containing lighting equipment

Type of lighting equipment	Eligible disposal facilities
Mercury-containing equipment: Lamps that use mercury for their operation and any other lighting equipment potentially contaminated with mercury as a result of in-house recycling or disassembling attempts.	A licensed recycling facility[1]: a facility licensed by the EPA to accept D120 waste for the purpose of recycling at that facility (i.e. has a license with treatment code R4 for D120 waste)

This requirement does not preclude you from transporting your equipment to a licensed temporary holding facility[2] that will forward your equipment to a licensed recycling facility for recycling. As evidence of proper disposal and decommissioning, you must obtain and maintain a recycling invoice from the licensed recycling facility for the decommissioned lighting equipment, which must be provided to us upon request.

Details of your decommissioning practices must be supplied to us for review before you are accredited to undertake this activity.

1.3. Mandatory safety training obligations

Installers must complete specified units of competency before they can undertake certain activities. Installers are approved for activities by submitting a certificate of competency from a registered training organisation (RTO) for the relevant units.

All installers must have completed the required training to undertake prescribed activities for Activities 12, 13, 14, 15, 17 and 21 – see tables 2 and 3 below for unit requirements. Qualified and licensed electricians and plumbers, and registered builders are exempt from these requirements. For activities 21A, 21C, 21D, 21E and 21F, installations must be undertaken by a licensed electrician.

You will have to make sure that installers for the above activities are submitted and approved by us via the VEU registry (www.veu-registry.vic.gov.au) prior to undertaking installations under the program. This includes electricians, plumbers and builders. You must keep your installer database

[1] Facilities licensed to recycle mercury-containing waste by the relevant environmental protection regulator in other jurisdictions, are also considered a licensed recycling facility for the purposes of this determination.

[2] A facility licensed by the EPA to accept D120 waste for storage pending recycling or accumulation of material intended for recycling (i.e. has a license with treatment codes D15 and/or R13 for D120 waste).

up to date and keep files on record to support those entries (whether that be a copy of their licence of completion of the relevant MST unit).

Table 2: 2020 MST unit requirements – available for training completed up to 31 March 2021

Group	Available Mandatory Safety Training units	
Group A – units relating to health and safety risks and OH&S requirements	**VU21858**:	Minimise health and safety risk when retrofitting for energy and water efficiency.
	CPCCOHS2001A:	Apply OHS requirements, policies and procedures in the construction industry.
	CPCPCM2043A:	Carry out WHS requirements.
Group B – unit relating to energy and water efficiency retrofits	**VU21859**:	Undertake retrofitting to improve energy and water efficiency.
Group C – units relating to working at heights*	**CPCCCM2010B**:	Work safely at heights.

* Group C unit not required for installations undertaken for activity 17 (shower rose)

Table 3: Current MST unit requirements – available for training completed from 1 January 2021 (or earlier for Group B units)

Group	Available Mandatory Safety Training units	
Group A – unit relating to energy and water efficiency retrofits, including managing risks	**VU23076**	Retrofit to improve energy and water efficiency
Group B – units relating to working at heights	**CPCCCM2010B**:	Work safely at heights.
	CPCCCM2010:	Work safely on scaffolding higher than two meters.
	RIIWHS204E:	Work safely at heights.

* Group B unit not required for installations undertaken for activity 17 (shower rose)

1.4. Common requirements for space conditioning, shower rose and incandescent lighting activities

Accredited person (AP) Requirements
You, or your associate, or an entity under your instructions, must not install a product for the purposes of decommissioning it as part of an activity under the program (e.g. you have not altered the baseline environment for a given installation for the purposes of inflating the VEEC claim for that installation). For an activity involving the decommissioning of product(s), you, your installer, and the consumer will need to provide a declaration to us stating that the decommissioned product was not installed for the purposes of decommissioning it as part of an activity under the program.

Accredited person (AP) Requirements

You must ensure you comply with the VEU code of conduct, Australian Consumer Law (ACL) and telemarketing requirements when engaging in marketing practices under the program (including telemarketing practices, door to door sales, and lead generation materials). See Section 2.4 of our Obligations and Program Guide for Accredited Persons for more detail.

To help mitigate risks relating to the program's reputation, we have also placed some additional administrative lead generation requirements on APs undertaking installations under these activities (as detailed in Appendix A).

You must ensure that all installers show evidence of their licence/s to the consumer prior to starting the installation. In addition, installers need to present photo identification showing which AP they represent in the VEU program.

You must ensure all installers provide a copy of the following documents to the consumer, where applicable:

- VEEC assignment form
- Invoice/proof of purchase
- Manufacturer's instructions
- Certificate of Electrical Safety.

You are required to take geo-tagged photographs to verify the activities have been performed in accordance with the VEET Regulations. Geo-tagged photographs must:

- be clear and in focus
- include any relevant markings
- include a date stamp showing the date the photographs were taken
- include the GPS derived latitude and longitude coordinates (this should be stored in the metadata and generated automatically by the device used to take the geo-tagged photographs).

We expect you to meet the geo-tagging requirements. In some instances where geo-tagged photos cannot be obtained, we may accept alternative evidence (e.g. a statutory declaration) that the existing unit was eligible and has been permanently rendered inoperable. You should state the reason why geo-tagged photos are not obtained.

An appendix(s) may be provided with a Certificate of Electrical Safety. Where an appendix is used the following criteria must be fulfilled:

- the certificate must refer to the appendix and list the number of pages,
- the appendix must be attached to the certificate,
- each appendix page is numbered, and the certificate number is referenced on each page,
- each appendix page is signed by the licensed electrician responsible for the completed work
- the type of work performed is specified for each premises being claimed for.

Accredited person (AP) Requirements

For the specific details required to be listed on the Certificate of Electrical Safety for each activity, see the evidentiary requirements listed below for each activity.

1.5. Audit requirements

You as the AP should undertake internal audits to ensure that VEECs undertaken for these activities are created in compliance with the VEET Act, the VEET Regulations and the VEET guidelines.

You are required to implement service and quality assurance measures to uphold the integrity of the VEU program. The more detailed the audits, the greater assurance for you that your installers are carrying out activities in accordance with the requirements of the program's legislation.

Appendix B outlines the minimum requirements for information that you should collect as part of your internal audits. When undertaking phone and field audits, you should ensure that, at a minimum, the following information is verified and recorded. This is not an exhaustive list and is recommended for use as a guide only. Changing circumstances, such as new activities and new business environments, may result in the need to collect information beyond what is listed below.

It is your responsibility to remain responsive to changing circumstances and to alter your internal audit regimes where necessary to maintain suitable levels of assurance. If in doubt, you should contact us to discuss acceptable quality assurance measures.

2. Requirements for space conditioning activities

2.1. Activity 12: Under floor insulation

A review is pending relating to administrative and installation requirements for the underfloor insulation activity. This review will be undertaken when ceiling insulation is re-introduced into the program. Until this review is complete, VEECs cannot be created for this activity.

Requirements	Description
Activity	Installers must install a product, or two or more products that: • are installed in respect of a floor area that is not insulated; and • are installed for a minimum of 20m^2 in accordance with AS 3999.
Product criteria	A product (or two or more products) that: • is/or are designed so that when installed together, comply with the performance requirements of AS/NZS 4859.1, and • that achieves or together achieve, a minimum winter value of R2.5, determined in accordance with AS/NZS 4859.1, and • is listed on the Register of Products by the time VEECs are created.
Training/licensing	Review pending
Eligible environments and installation limits	• Residential premises — no limits • Business/non-residential premises — no limits
Evidence	Review pending

2.2. Activity 13: Double glazed window

Requirements	Description
Activity	Installers must install a glazing product • which meets the below product criteria • in place of one or more windows in an external wall • install on a minimum area of 5m^2.
Product criteria	A glazing product that: • achieves a maximum total U-value of 4 in accordance with AS 2047 • is WERS labelled and rated with a minimum star rating of 4 for heating • complies with the performance requirements of AS 2047 and AS 1288 • is listed on the Register of Products by the time VEECs are created.
Training/licensing	Installers completing training up to 31 March 2021 are able to apply for VEU approval for this activity by completing the following MST units: • One MST unit from Group A • One MST unit from Group B • One MST unit from Group C. Refer to Table 2 above. Installers completing training from 1 January 2021 are able to apply for VEU approval for this activity by completing the following MST units: • One MST unit from Group A • One MST unit from Group B Refer to Table 3 above.
Eligible environments and installation limits	• Residential premises — no limits • Business/non-residential premises — no limits
Evidence	For each installation you must collect and maintain the following: • VEEC assignment form completed and signed by the installer and consumer • Invoice/ proof of purchase listing all products (brand and model) installed. • For business or non-residential upgrades, the invoice for the upgrade must include: – the name and address of the energy consumer – the Australian Business Number/Australian Company Number (ABN/ACN) of the energy consumer (where relevant) – the installation address (if different to the energy consumer) – the name, address and ABN of the installer business

2.3. Activity 14: Thermally efficient window product

Requirements	Description
Activity	Installers must: • install a product which meets the below product criteria on one or more single glazed windows in an external wall • install on a minimum glazed area of 5m² • install a product so that when installed results in a still air gap being created between the single glazed window and the product • ensure the existing window is operable after the upgrade to the same extent it was before the upgrade.
Product criteria	A product that: • when installed on a single glazed window, results in a still air gap being created between the single glazed window and the product and raises the thermal efficiency performance of the window • is listed on the Register of Products by the time VEECs are created.
Training/licensing	Installers completing training up to 31 March 2021 are able to apply for VEU approval for this activity by completing the following MST units: • One MST unit from Group A • One MST unit from Group B • One MST unit from Group C. Refer to Table 2 above. Installers completing training from 1 January 2021 are able to apply for VEU approval for this activity by completing the following MST units: • One MST unit from Group A • One MST unit from Group B Refer to Table 3 above.
Eligible environments and installation limits	• Residential premises — no limits • Business/non-residential premises — no limits

Requirements	Description
Evidence	For each installation you must collect and maintain the following: • VEEC assignment form completed and signed by the installer and consumer • Invoice/ proof of purchase listing all products (brand and model) installed. • For business or non-residential upgrades, the invoice for the upgrade must include: – the name and address of the energy consumer – the Australian Business Number/Australian Company Number (ABN/ACN) of the energy consumer (where relevant) – the installation address (if different to the energy consumer) – the name, address and ABN of the installer business

2.4. Activity 15: Weather sealing activities

- When undertaking one or more of the below weather sealing activities, you must ensure that the upgrade does not result in:
  - the volume of air that is exchanged at the premises each hour being less than 50% of the volume of the premises;
  - the premises failing to comply with Part 3.8.5 of Volume Two of the Building Code.

Weather sealing activities in premises with open flue gas heater(s) and/or flueless gas heater(s)

- Special care needs to be taken by accredited persons and scheme participants in relation to weather sealing activities in premises with open flue gas space heater(s) and/or flueless gas space heaters as these premises. These gas heaters require a certain amount of fixed ventilation to operate safely. Weather sealing upgrades in these premises can contribute to the risk of heaters operating without adequate ventilation, which increases the risk of carbon-monoxide poisoning.
- The VEU code of conduct requires that an accredited person or scheme participant carrying out lead generation or marketing activities for a prescribed activity must give a person clear and accurate information about the prescribed activity[3]. In regards to the weather sealing activity, this includes providing consumers of premises which has one or more open flue gas space heater(s) and/or flueless gas space heater(s) with information on:
  - the importance of ensuring adequate ventilation when using their gas heater to ensure its safe use as highlighted in Energy Safe Victoria's Be Sure campaign and Heating your home safely with gas information page
  - the advice by Victorian Building Authority and Sustainability Victoria that a licensed gasfitter should be engaged to check the safe operation of the appliances as part of weather sealing upgrades
- To mitigate risks of not complying with your obligations under the VEU code of conduct, we recommend accredited persons and scheme participants work to ensure that their installers or lead generators are provided appropriate training to identify which gas space heaters are flueless or open flue and to communicate the above information to consumers.
- Other useful information published by Energy Safe Victoria for accredited persons and/or scheme participants relevant to the undertaking of weather sealing activity(s) in premises with open flue gas space heater(s) and/or flueless gas space heater(s)
  - Guidance on the difference between a flueless/unflued gas heater and a room sealed gas heater

[3] Section 14(b), Schedule 6, VEET Regulations.

- Information on negative pressure environment
- Information on testing for negative pressure and carbon monoxide spillage by a licensed gasfitter

Activity 15A: Sealing door

Requirements	Description
Activity	Installers must install a product or combination of products on the frame of an external door or to each edge of an external door: • which meets the below product criteria • in accordance with manufacturer's instructions. • so that the installation restricts airflow around the entire perimeter of the door • so that that installation does not impair the normal operation of the door
Product criteria	A door sealing or door weather stripping product that: • when installed restricts airflow around the entire perimeter of the door • when installed does not impair normal operation of the door • is covered by warranty against defects for at least 2 years from the date of installation • is listed on the Register of Products by the time VEECs are created.
Training/licensing	Installers completing training up to 31 March 2021 are able to apply for VEU approval for this activity by completing the following MST units: • One MST unit from Group A • One MST unit from Group B • One MST unit from Group C. Refer to Table 2 above. Installers completing training from 1 January 2021 are able to apply for VEU approval for this activity by completing the following MST units: • One MST unit from Group A • One MST unit from Group B Refer to Table 3 above.
Eligible environments and installation limits	Residential premises — no limits

Requirements	Description
Evidence	For each installation you must collect and maintain the following: • VEEC assignment form completed and signed by the installer and consumer • Invoice/ proof of purchase listing all products (brand and model) installed. • For business or non-residential upgrades, the invoice for the upgrade must include: – the name and address of the energy consumer – the Australian Business Number/Australian Company Number (ABN/ACN) of the energy consumer (where relevant) – the installation address (if different to the energy consumer) • the name, address and ABN of the installer business • Geo-tagged photo(s) of each installed door seal.

Activity 15B: Sealing window

Requirements	Description
Activity	Installers must install a product or combination of products on to the frame of an openable external window: • which meets the below product criteria • in accordance with the manufacturer's instructions. • so that the installation restricts airflow through the window • so that the installation does not impair the normal operation of the window
Product criteria	A window sealing or window weather stripping product that: • when installed restricts airflow around the relevant edges of the window • when installed does not impair normal operation of the window • is covered by warranty against defects for at least 2 years from the date of installation • is listed on the Register of Products by the time VEECs are created.
Training/licensing	Installers completing training up to 31 March 2021 are able to apply for VEU approval for this activity by completing the following MST units: • One MST unit from Group A • One MST unit from Group B • One MST unit from Group C. Refer to Table 2 above. Installers completing training from 1 January 2021 are able to apply for VEU approval for this activity by completing the following MST units: • One MST unit from Group A • One MST unit from Group B Refer to Table 3 above.
Eligible environments and installation limits	Residential premises — no limits
Evidence	For each installation you must collect and maintain the following: • VEEC assignment form completed and signed by the installer and consumer • Invoice/ proof of purchase listing all products (brand and model) installed. • Geo-tagged photo(s) of each installed window seal.

Activity 15C: Self-sealing ceiling or wall exhaust fan

Requirements	Description
Activity	Installers must: • remove and decommission a ceiling or wall exhaust fan that does not comply with the upgrade product criteria • install a product which meets the below product criteria • install a product in accordance with the manufacturer's instructions and in the place of the decommissioned fan.
Product criteria	A product that: • is a ceiling or wall exhaust fan • expels air either outside or into the roof space of the premises it is installed in • is fitted with a self-closing damper, flap, filter or other sealing product that is designed to: – allow airflow through the exhaust of the fan when the fan is operating and, – restrict airflow when the fan is not operating • is covered by a warranty against defects for a period of at least 2 years from the date of installation • is listed on the Register of Products by the time VEECs are created.
Training/licensing	Installers completing training up to 31 March 2021 are able to apply for VEU approval for this activity by completing the following MST units: • One MST unit from Group A • One MST unit from Group B • One MST unit from Group C. Refer to Table 2 above. Installers completing training from 1 January 2021 are able to apply for VEU approval for this activity by completing the following MST units: • One MST unit from Group A • One MST unit from Group B Refer to Table 3 above. Installers must be licensed electricians registered with Energy Safe Victoria if electrical work is required.
Eligible environments and installation limits	Residential premises — no limits

Requirements	Description
Evidence	For each installation you must collect and maintain the following: • VEEC assignment form completed and signed by the installer and consumer • Invoice/ proof of purchase listing all products (brand and model) installed • Certificate of Electrical Safety detailing the method of decommissioning, where wiring work is required • Geo-tagged photo(s) of each installed self-sealing wall exhaust or ceiling fan • Geo-tagged photo(s) of each removed exhaust or ceiling fan.

Activity 15D: Sealing existing ceiling or wall exhaust fan

Requirements	Description
Activity	Installers must: • install a product which meets the below product criteria • install a product in accordance with the manufacturer's instructions • install a product on a ceiling or a wall exhaust fan that expels air either outside or into the roof space of the premises and on which an exhaust fan seal (15D product) is not already installed • conduct a compatibility check to ensure the installed exhaust fan seal is compatible with the existing exhaust fan.
Product criteria	A product that • is a self-closing damper, flap, filter or other sealing product • is designed so that when installed on a ceiling or wall exhaust fan, it allows airflow through the exhaust of the fan when the fan is operating and restricts airflow when the fan is not operating • is covered by a warranty against defects for a period of at least 2 years from the date of installation • is listed on the Register of Products by the time VEECs are created.
Training/licensing	Installers must be licensed electricians registered with Energy Safe Victoria
Eligible environments and installation limits	Residential premises — no limits
Evidence	For each installation you must collect and maintain the following: • VEEC assignment form completed and signed by the installer and consumer • Invoice/ proof of purchase listing all products (brand and model) installed. • Certificate of Electrical Safety, where wiring work is required • Geo-tagged photo(s) of each installed exhaust fan seal.

Activity 15E: Sealing external wall vent

Requirements	Description
Activity	Installers must install a product: • which meets the product criteria below • in accordance with the manufacturer's instructions • in an unsealed wall vent • with the result that a ventilation opening in an external wall is sealed or closed..
Product criteria	A wall vent sealing product that: • is made of a robust non-shrinking sealing material • is covered by a warranty against defects for a period of at least 2 years from the date of installation • is listed on the Register of Products by the time VEECs are created.
Training/licensing	Installers completing training up to 31 March 2021 are able to apply for VEU approval for this activity by completing the following MST units: • One MST unit from Group A • One MST unit from Group B • One MST unit from Group C. Refer to Table 2 above. Installers completing training from 1 January 2021 are able to apply for VEU approval for this activity by completing the following MST units: • One MST unit from Group A • One MST unit from Group B Refer to Table 3 above.
Eligible environments and installation limits	Residential premises — no limits
Evidence	For each installation you must collect and maintain the following: • VEEC assignment form – completed and signed by the installer and consumer • invoice/proof of purchase listing all products (brand and model) installed • geo-tagged photo(s) of each installed wall seal.

Activity 15F: Permanent sealing of chimney or flue

Requirements	Description
Activity	Installer must install a product: • which meets the below product criteria • in accordance with the manufacturer's instructions • that is an appropriate size to be installed in the chimney or flue • in an unsealed chimney or flue of an open fireplace in which a permanent chimney or flue seal (15F product) is not already installed • so that when fitted to a chimney or flue of an open fireplace, the product – restricts the airflow into or out of the chimney or flue when closed – allows the fireplace to operate safely and effectively when open • so that it is fitted permanently to the chimney or flue. Installer must explain to the consumer how the product should be used, including the required maintenance of the chimney or flue seals.
Product criteria	A chimney or flue sealing product that: • is designed so that when fitted to a chimney or flue of an open fireplace used to burn solid fuel, the product – restricts the airflow into or out of the chimney or flue when closed – allows the fireplace to operate safely and effectively when open • is designed to be fitted permanently to the chimney or flue • is covered by a warranty against defects for a period of at least 5 years from the date of installation • is listed on the Register of Products by the time VEECs are created.
Training/licensing	Installers completing training up to 31 March 2021 are able to apply for VEU approval for this activity by completing the following MST units: • One MST unit from Group A • One MST unit from Group B • One MST unit from Group C. Refer to Table 2 above. Installers completing training from 1 January 2021 are able to apply for VEU approval for this activity by completing the following MST units: • One MST unit from Group A • One MST unit from Group B Refer to Table 3 above.

Requirements	Description
Eligible environments and installation limits	Residential premises which is mainly heated by gas or electricity — no limits
Evidence	For each installation you must collect and maintain the following: • VEEC assignment form completed and signed by the installer and consumer • Invoice/proof of purchase listing all products (brand and model) installed • Geo-tagged photo(s) of each installed permanent chimney or flue seal.

Activity 15G: Temporary sealing of chimney or flue

Requirements	Description
Activity	Installers must install a product: • which meets the below product criteria • in accordance with manufacturer's instructions • into an unsealed chimney or flue of a fireplace in which a temporary chimney or flue seal (15G product) is not already installed • that is an appropriate size to be installed in the chimney or flue • so that when fitted to a chimney or flue of an open fireplace used to burn solid fuel, the product: – restricts the airflow into or out of the chimney or flue when closed – allows the fireplace to operate safely and effectively when open • with signage that includes instructions for removing the product. Installers must explain to the consumer how the product should be used, including the required maintenance of the chimney or flue seals.
Product criteria	A product that: • is designed so that when fitted to a chimney or flue of an open fireplace used to burn solid fuel, the product: – restricts the airflow into or out of the chimney or flue when closed – allows the fireplace to operate safely and effectively when open • is designed to be fitted to the chimney or flue on a temporary or seasonal basis • is covered by a warranty against defects for a period of at least 2 years from the date of installation • is not a chimney or flue balloon • is listed on the Register of Products by the time VEECs are created.
Training/licensing	Installers completing training up to 31 March 2021 are able to apply for VEU approval for this activity by completing the following MST units: • One MST unit from Group A • One MST unit from Group B • One MST unit from Group C. Refer to Table 2 above. Installers completing training from 1 January 2021 are able to apply for VEU approval for this activity by completing the following MST units: • One MST unit from Group A • One MST unit from Group B Refer to Table 3 above.

Requirements	Description
Eligible environments and installation limits	Residential premises which is predominantly heated by gas or electricity — no limits
Evidence	For each installation you must collect and maintain the following: • VEEC assignment form completed and signed by the installer and consumer • Invoice/proof of purchase listing all products (brand and model) installed • Geo-tagged photo(s) of each installed chimney product.

Activity 15H: Sealing of evaporative cooler outlet

Requirements	Description
Activity	Installers must install a product (not being the reinstallation of a product): • in accordance with the manufacturer's instructions and which meets the product criteria below • on a ducted evaporative cooling system to which a ceiling outlet sealing is not already installed • with instructions regarding: – the installation and removal of the product – the time of year that the product should be installed and removed.
Product criteria	An evaporative cooler outlet sealing product that: • is designed to cover the ceiling outlet of a ducted evaporative cooling system and restrict airflow from inside the residential premises into the evaporative cooling ductwork • is designed to be installed on a temporary or seasonal basis • is covered by a warranty against defects for a period of at least 2 years from the date of installation • is listed on the Register of Products by the time VEECs are created.

Requirements	Description
Training/licensing	Installers completing training up to 31 March 2021 are able to apply for VEU approval for this activity by completing the following MST units: • One MST unit from Group A • One MST unit from Group B • One MST unit from Group C. Refer to Table 2 above. Installers completing training from 1 January 2021 are able to apply for VEU approval for this activity by completing the following MST units: • One MST unit from Group A • One MST unit from Group B Refer to Table 3 above.
Eligible environments and installation limits	Residential premises — no limits
Evidence	For each installation you must collect and maintain the following: • VEEC assignment form completed and signed by the installer and consumer • Invoice/proof of purchase listing all products (brand and model) installed • Geo-tagged photo(s) of each installed evaporative cooling cover.

3. Requirements for shower rose activities

3.1. Activity 17: Low flow shower rose

Guidance notes for undertaking shower rose replacement (activity 17)

- Installers can measure the flow rate of the existing shower rose by using a simple bucket test, running the water at a typical showering temperature. To do this, hold a bucket under the running shower for 15 seconds. Measure the quantity of water captured and multiply by 4 to ascertain the per minute flow rate. To be eligible for replacement, the flow rate of the existing shower rose must exceed 9 litres per minute.
- Where we have identified that the existing shower rose is already efficient (and so not eligible for replacement), bucket test results will not be accepted as sole proof of eligibility.
- Efficient showerheads are typically not compatible with gravity-fed water heaters (most already have low-flow rates). They may also not be compatible with older instantaneous gas water heaters as reduced flow can interfere with the water heater operations.

Requirements	Description
Activity	Installers must: • physically remove and decommission a shower rose with a flow rate above 9L/min • install a shower rose which meets the below product criteria • verify the existing shower rose was connected to a water supply before the installation • ask the consumer if they have had a low flow shower rose installation before.
Product criteria	A low flow shower rose product that: • complies with the requirements of AS/NZS 3662 that achieves a minimum 3 star rating and a flow rate of range E when assessed, registered and labelled in accordance with AS/NZS 6400 • is listed on the Register of Products by the time VEECs are created.
Training/licensing	Installers completing training up to 31 March 2021 are able to apply for VEU approval for this activity by completing the following MST units: • One MST unit from Group A • One MST unit from Group B Refer to Table 3 above. Installers completing training from 1 January 2021 are able to apply for VEU approval for this activity by completing one MST unit from Group A. Refer to Table 3 above.

Requirements	Description
Eligible environments and installation limits	• Residential premises — maximum of two products up to 9 June 2019 and three products from 10 June 2019 onwards • Business/non-residential premises — no limits
Evidence	For each installation you must collect and maintain the following: • VEEC assignment form completed and signed by the installer and consumer • Invoice/proof of purchase listing all products (brand and model) installed • For business or non-residential upgrades, the invoice for the upgrade must include: – the name and address of the energy consumer – the Australian Business Number/Australian Company Number (ABN/ACN) of the energy consumer (where relevant) – the installation address (if different to the energy consumer) – the name, address and ABN of the installer business • Stock reconciliation • Recycling invoice • Geo-tagged photo(s) of each removed shower rose in its original position prior to removal – the face of every rose should be clear and in focus (please see Appendix C for an example)

4. Requirements for incandescent lighting activities

VEECs are not able to be created for activity 21 lighting upgrades undertaken after 31 January 2023.

4.1. Activity 21A: Incandescent GLS lamp or CFL replacement

Requirements	Description
Activity	Installers must: • decommission a mains voltage incandescent GLS lamp of at least 25 watts (tungsten filament lamp) or 18 watts (tungsten halogen lamp) or a mains voltage compact fluorescent lamp of at least 5 watts • take away the decommissioned lamp for recycling • physically install a lamp which meets the below product criteria. Installers must not: • install a LED lamp into dimmable circuits unless the lamp is listed as suitable for dimmable circuits in our Register of Products • give the consumer spare LED lamps • replace LED lamps All existing lamps must be decommissioned and disposed of at a recycling facility in accordance with the VEET Regulations and EPA requirements prior to certificate creation (see section 1.3.1 and 1.3.2 for further details).
Product criteria	A LED GLS lamp that: • has a light output equivalent to or higher than the decommissioned lamp • achieves a minimum light source efficacy level of 84 lumens/watt • if the lamp is to be installed in a dimmable circuit, is approved by the manufacturer as suitable for such a circuit • has a minimum lifetime rating of 15,000 hours • has a colour temperature that is, or is capable of being set to, warm white (2700K up to and including 3500K) or cool white (more than 3500K up to and including 4000K) • has a minimum power factor of 0.55 • is listed on the Register of Products by the time VEECs are created. • meets the omni-directional performance requirement described in the Lighting Product Application Guide

Requirements	Description
Training/licensing	Installers must be: • a licensed electrician (also known as an 'A Grade' electrician). Work may also be performed by the holder of a supervised worker's licence (L) or (ES) (i.e. apprentices) provided they are effectively supervised by an A Grade electrician in accordance with the guidance outlined in Energy Safe Victoria's supervising framework[4]. • suitably trained to minimise mercury risks associated with the replacement of CFLs.
Eligible environments and installation limits	• Lamp must be installed in a light fitting that is connected to an electricity supply before installation, and operable after the installation • Residential premises — one lamp per luminaire at premises • Business/non-residential premises — one lamp per luminaire at premises.

[4] In particular, the elements of effective supervision outlined in https://www.esv.vic.gov.au/technical-information/electrical-installations-and-infrastructure/electrical-technical-guidelines-and-determinations/requirements-for-the-effective-supervision-of-apprentice-electricians/

Requirements	Description
Evidence	For each installation you must collect and maintain the following: • VEEC assignment form completed and signed by the installer (i.e. 'A grade' electrician) and consumer. The installer (i.e. 'A grade' electrician) must sign the form at the installation premises. • Invoice/proof of purchase listing: – the installed product brand and model – purchaser's name and address • For business or non-residential upgrades, the invoice for the upgrade must include: – the name and address of the energy consumer – the Australian Business Number/Australian Company Number (ABN/ACN) of the energy consumer (where relevant) – the installation address (if different to the energy consumer) – the name, address and ABN of the installer business • Recycling invoice[5] clearly showing: – an itemised breakdown of the disposed lighting equipment – the date of collection • Stock reconciliation itemising the disposed lighting equipment decommissioned per upgrade site in kilograms to establish a link between each installation and the recycling invoice • Stock delivery docket (or equivalent documentation) which enables you to track the product batch for an installed lamp • Certificate of Electrical Safety, where wiring work is required • Geo-tagged photo(s): – of each upgrade space showing the inefficient lamps and/or fittings in each area before removal from their original position – of the installer at every installation showing their face and identity tag (or another form of ID) – showing the quantity of removed lamps – showing all models of upgrade lamp products including all relevant markings. You must also establish and maintain: • training documents regarding mitigation of mercury risks and spillages • training log recording installer training, including evidence of achievement of installer competency against training requirements.

[5] From 1 July 2019, EPA requires that all e-waste in Victoria must be provided to an e-waste service provider. Please refer to section 1.3.1 for further information.

4.2. Activity 21B: Incandescent reflector lamp replacement

Requirements	Description
Activity	Installers must: • decommission a mains voltage incandescent reflector lamp and take it away for recycling • physically install a lamp which meets the below product criteria. Installers must not: • install a LED lamp into dimmable circuits unless the lamp is listed as suitable for dimmable circuits in our Register of Products • give the resident/business spare LED lamps • replace LED lamps. All existing lamps must be decommissioned and disposed of at a recycling facility in accordance with the VEET Regulations and EPA requirements prior to certificate creation (see section 1.3.1 and 1.3.2 for further details).
Product criteria	A LED lamp that: • has a light output equivalent to the decommissioned lamp • achieves a minimum light source efficacy level of 78 lumens/watt • has a minimum lifetime rating of 15,000 hours • when externally installed, must have a minimum tested total luminous flux of 950 lumens, a minimum IP rating of IP44 and be fit for purpose • if the lamp is to be installed in a dimmable circuit, is approved by the manufacturer as suitable for such a circuit • has a colour temperature that is, or is capable of being set to, warm white (2700K up to and including 3500K) or cool white (more than 3500K up to and including 4000K) • has a minimum power factor of 0.55 • is listed on the Register of Products by the time VEECs are created.

Requirements	Description
Training/licensing	Installers completing training up to 31 March 2021 are able to apply for VEU approval for this activity by completing the following MST units: • One MST unit from Group A • One MST unit from Group B • One MST unit from Group C. Refer to Table 2 above. Installers completing training from 1 January 2021 are able to apply for VEU approval for this activity by completing the following MST units: • One MST unit from Group A • One MST unit from Group B Refer to Table 3 above. If electrical work is required, installers must be licensed electricians (also known as 'A Grade' electricians). Work may also be performed by the holder of a supervised worker's licence (L) or (ES) (i.e. apprentices) provided they are effectively supervised by an A Grade electrician in accordance with the guidance outlined in Energy Safe Victoria's supervising framework.[6]
Eligible environments and installation limits	• Lamp must be installed in a light fitting that is connected to an electricity supply before installation, and operable after the installation • Residential premises — one lamp per luminaire(socket) at premises • Business/non-residential premises — one lamp per luminaire(socket) at premises.

[6] In particular, the elements of effective supervision outlined in https://www.esv.vic.gov.au/technical-information/electrical-installations-and-infrastructure/electrical-technical-guidelines-and-determinations/requirements-for-the-effective-supervision-of-apprentice-electricians/

Requirements	Description
Evidence	For each installation you must collect and maintain the following: • VEEC assignment form completed and signed by the installer and consumer • Invoice/proof of purchase listing the: – installed product brand and model – purchaser's name and address • For business or non-residential upgrades, the invoice for the upgrade must include: – the name and address of the energy consumer – the Australian Business Number/Australian Company Number (ABN/ACN) of the energy consumer (where relevant) – the installation address (if different to the energy consumer) – the name, address and ABN of the installer business • Recycling invoice[7] clearly showing: – an itemised breakdown of the disposed lighting equipment – the date of collection • Stock reconciliation itemising the disposed lighting equipment decommissioned per upgrade site in kilograms to establish a link between each installation and the recycling invoice • Certificate of Electrical Safety, where wiring work is required • Geo-tagged photo(s): – of each upgrade space showing the inefficient lamps and/or fittings in each area before removal from their original position – showing the quantity of removed lamps – showing all models of upgrade lamp products including all relevant markings.

[7] From 1 July 2019, EPA requires that all e-waste in Victoria must be provided to an e-waste service provider. Please refer to section 1.3.1 for further information.

4.3. Activity 21C: 12V halogen lamp replacement

Requirements	Description
Activity	Installers must: • decommission a 12volt tungsten halogen lamp of at least 35 watts and take away for recycling • physically install a lamp which meets the below product criteria • conduct a pre-installation safety and compatibility inspection of existing lamps and transformers to confirm the compatibility of the new low energy lamps with the transformers and record the brand and model number of all existing electronic or magnetic transformers • explain the installation process to the consumer, specifically the purpose and outcomes of the pre-installation check (including incompatible lamp/transformer combinations) • provide the consumer with information relating to their lamp's compatibility with standard Australian transformers • outline what the consumer should do if there are any post-installation issues. Installers must not: • install a LED lamp into dimmable circuits unless the lamp is listed as suitable for dimmable circuits in our Register of Products • give the resident/business spare LED lamps • replace LED lamps • replace mains voltage lamps. All existing lamps must be decommissioned and disposed of at a recycling facility in accordance with the VEET Regulations and EPA requirements prior to certificate creation (see section 1.3.1 and 1.3.2 for further details).

Requirements	Description
Product criteria	A non-integrated LED lamp that: • if installed in a dimmable circuit, is approved by the manufacturer as suitable for a dimmable circuit • achieves a minimum light source efficacy level of 62 lumens/watt • has a minimum light output of 420 lumens • has a minimum lifetime rating of 15,000 hours • has a colour temperature that is, or is capable of being set to, warm white (2700K up to and including 3500K) or cool white (more than 3500K up to and including 4000K) • in the case of a product installed in residential premises, has a minimum beam angle of 55 degrees as determined in accordance with IEC/TR 61341 Edition 2.0 • is compatible with the type of transformer or converter used with the replaced halogen lamp – compatibility as listed on the Register of Products • has a combined lamp circuit power factor (lamp and transformer) of ≥ 0.7 for lamps to be installed in residential premises • has a combined lamp circuit power factor (lamp and transformer) of ≥ 0.9 for lamps to be installed in business or other non-residential premises • is listed on the Register of Products by the time VEECs are created.
Training/licensing	Installers must be a licensed electrician (also known as an 'A Grade' electrician). Work may also be performed by the holder of a supervised worker's licence (L) or (ES) (i.e apprentices) provided they are effectively supervised by an A Grade electrician in accordance with the guidance outlined in Energy Safe Victoria's supervising framework.[8]
Eligible environments and installation limits	• Lamp must be installed in a light fitting that is connected to an electricity supply before installation, and operable after the installation • Residential premises — one lamp per luminaire at premises • Business/non-residential premises — one lamp per luminaire at premises.

[8] In particular the elements of effective supervision outlined in https://www.esv.vic.gov.au/technical-information/electrical-installations-and-infrastructure/electrical-technical-guidelines-and-determinations/requirements-for-the-effective-supervision-of-apprentice-electricians/

Requirements	Description
Evidence	For each installation you must collect and maintain the following: • VEEC assignment form completed and signed by the installer (i.e. 'A grade' electrician) and consumer. The installer (i.e. 'A grade' electrician) must sign the form at the installation premises. • Invoice/proof of purchase listing the: – installed product brand and model – purchaser's name and address • For business or non-residential upgrades, the invoice for the upgrade must include: – the name and address of the energy consumer – the Australian Business Number/Australian Company Number (ABN/ACN) of the energy consumer (where relevant) – the installation address (if different to the energy consumer) – the name, address and ABN of the installer business • Recycling invoice[9] clearly showing: – an itemised breakdown of the disposed lighting equipment – the date of collection • Stock reconciliation itemising the disposed lighting equipment decommissioned per upgrade site in kilograms to establish a link between each installation and the recycling invoice • Geo-tagged photo(s): – of each upgrade space showing the inefficient lamps and/or fittings in each area before removal from their original position – showing the quantity of removed lamps – showing all models of upgrade lamp products including all relevant markings • Non-prescribed Certificate of Electrical Safety listing all wiring work conducted.

[9] From 1 July 2019, EPA requires that all e-waste in Victoria must be provided to an e-waste service provider. Please refer to section 1.3.1 for further information.

4.4. Activity 21D: 12V downlight and transformer replacement

Requirements	Description
Activity	Installers must: • decommission a 12 volt tungsten halogen downlight luminaire that uses a 12 volt tungsten halogen lamp of at least 35 watts and the transformer associated with the replaced lamp and take them away for recycling • physically install a luminaire which meets the product criteria below • explain the installation process to the consumer • outline what the consumer should do if there are any post-installation issues. Installers must not: • install a luminaire into dimmable circuits unless the luminaire is listed as suitable for dimmable circuits in our Register of Products • give the resident/business spare LED luminaires • replace existing LED luminaires • replace mains voltage luminaires. All existing lamps must be decommissioned and disposed of at a recycling facility in accordance with the VEET Regulations and EPA requirements prior to certificate creation (see section 1.3.1 and 1.3.2 for further details).
Product criteria	A mains voltage downlight LED luminaire that: • if the downlight luminaire is to be installed in a dimmable circuit, is approved by the manufacturer as suitable for a dimmable circuit • achieves a minimum light source efficacy level of 58 lumens/watt • has a minimum light output of 400 lumens • has a minimum lifetime rating of 15,000 hours • has a colour temperature that is, or is capable of being set to, warm white (2700K up to and including 3500K) or cool white (more than 3500K up to and including 4000K) • in the case of a product installed in residential premises, has a minimum beam angle of 40 degrees when determined in accordance with IEC/TR 61341 Edition 2.0 • has a minimum power factor of 0.55 • is listed on the Register of Products by the time VEECs are created.

Requirements	Description
Training/licensing	Installers must be a licensed electrician (also known as an 'A Grade' electrician). Work may also be performed by the holder of a supervised worker's licence (L) or (ES) (i.e. apprentices) provided they are effectively supervised by an A Grade electrician in accordance with the guidance outlined in Energy Safe Victoria's supervising framework.[10]
Eligible environments and installation limits	• Lamp must be installed in a light fitting that is connected to an electricity supply before installation, and operable after the installation • Residential premises — one lamp per luminaire(socket) at premises • Business/non-residential premises — one lamp per luminaire(socket) at premises.

[10] In particular the elements of effective supervision outlined in https://www.esv.vic.gov.au/technical-information/electrical-installations-and-infrastructure/electrical-technical-guidelines-and-determinations/requirements-for-the-effective-supervision-of-apprentice-electricians/

Requirements	Description
Evidence	For each installation you must collect and maintain the following: • VEEC assignment form completed and signed by the installer (i.e. 'A grade' electrician) and consumer. The installer (i.e. 'A grade' electrician) must sign the form at the installation premises. • Invoice/proof of purchase listing the: – installed product brand and model – purchaser's name and address • For business or non-residential upgrades, the invoice for the upgrade must include: – the name and address of the energy consumer – the Australian Business Number/Australian Company Number (ABN/ACN) of the energy consumer (where relevant) – the installation address (if different to the energy consumer) – the name, address and ABN of the installer business • Recycling invoice[11] clearly showing: – an itemised breakdown of the disposed lighting equipment – the date of collection • Stock reconciliation itemising the disposed lighting equipment decommissioned per upgrade site in kilograms to establish a link between each upgrade site and the recycling invoice • Geo-tagged photo(s): – of each upgrade space showing the inefficient lamps and/or fittings in each area before removal from their original position – showing the quantity of removed lamps – showing all models of upgrade lamp and transformer products including all relevant markings • Non-prescribed Certificate of Electrical Safety listing all wiring work conducted.

[11] From 1 July 2019, EPA requires that all e-waste in Victoria must be provided to an e-waste service provider. Please refer to section 1.3.1 for further information.

4.5. Activity 21E: Mains voltage GU10 halogen lamp replaced with GU10 lamp

Requirements	Description
Activity	Installers must: • decommission a mains voltage tungsten halogen lamp of at least 35 watts with a GU10 base and take away lamps for recycling • physically install a lamp which meets the product criteria below • outline what the consumer should do if there are any post-installation issues. Installers must not: • install a LED lamp into dimmable circuits unless the lamp is listed as suitable for dimmable circuits in our Register of Products • give the resident/business spare GU10 LED lamps • replace existing GU10 LED lamps. All existing lamps must be decommissioned and disposed of at a recycling facility in accordance with the VEET Regulations and EPA requirements prior to certificate creation (see section 1.3.1 and 1.3.2 for further details).
Product criteria	A LED lamp with integrated driver that has a GU10 base which: • achieves a specified minimum light source efficacy level of 58 lumens/watt • has a minimum light output of 400 lumens • has a minimum lifetime rating of 15,000 hours • has a colour temperature that is, or is capable of being set to, warm white (2700K up to and including 3500K) or cool white (more than 3500K up to and including 4000K) • if the lamp is to be installed in a dimmable circuit, is approved by the manufacturer as suitable for a dimmable circuit • in the case of a product installed in residential premises, has a minimum beam angle of 55 degrees when determined in accordance with IEC/TR 61341 Edition 2.0 • has a minimum power factor of 0.55 • is listed on the Register of Products by the time VEECs are created.

Requirements	Description
Training/licensing	Installers must be a licensed electrician (also known as an 'A Grade' electrician). Work may also be performed by the holder of a supervised worker's licence (L) or (ES) (i.e. apprentices) provided they are effectively supervised by an A Grade electrician in accordance with the guidance outlined in Energy Safe Victoria's supervising framework.[12]
Eligible environments and installation limits	• Lamp must be installed in a light fitting that is connected to an electricity supply before installation, and operable after the installation • Residential premises — one lamp per luminaire at premises • Business/non-residential premises — one lamp per luminaire at premises.

[12] In particular, the elements of effective supervision outlined in https://www.esv.vic.gov.au/technical-information/electrical-installations-and-infrastructure/electrical-technical-guidelines-and-determinations/requirements-for-the-effective-supervision-of-apprentice-electricians/

Requirements	Description
Evidence	For each installation you must collect and maintain the following: • VEEC assignment form completed and signed by the installer (i.e. 'A grade' electrician) and consumer. The installer (i.e. 'A grade' electrician) must sign the form at the installation premises. • Invoice/proof of purchase listing the: – installed product brand and model – purchaser's name and address • For business or non-residential upgrades, the invoice for the upgrade must include: – the name and address of the energy consumer – the Australian Business Number/Australian Company Number (ABN/ACN) of the energy consumer (where relevant) – the installation address (if different to the energy consumer) – the name, address and ABN of the installer business • Recycling invoice[13] clearly showing: – an itemised breakdown of the disposed lighting equipment – the date of collection • Stock reconciliation itemising the disposed lighting equipment decommissioned per upgrade site in kilograms to establish a link between each upgrade site and the recycling invoice • Geo-tagged photo(s): – of each upgrade space showing the inefficient lamps and/or fittings in each area before removal from their original position – showing the quantity of all removed lamps – showing all models of upgrade lamp products including all relevant markings • Certificate of Electrical Safety listing all wiring work conducted.

[13] From 1 July 2019, EPA requires that all e-waste in Victoria must be provided to an e-waste service provider. Please refer to section 1.3.1 for further information.

4.6. Activity 21F: Mains voltage GU10 downlight replaced with integrated downlight

Requirements	Description
Activity	Installers must: • decommission a mains voltage tungsten halogen downlight luminaire that uses a tungsten halogen lamp of at least 35 watts with a GU10 base and take it away for recycling • physically install a luminaire which meets the product criteria below • outline what the consumer should do if there are any post-installation issues. Installers must not: • install a luminaire into dimmable circuits unless the lamp is listed as suitable for dimmable circuits in our Register of Products • give the resident/business spare LED lamps and/or LED luminaires • replace existing LED lamps and/or LED luminaires. All existing lamps must be decommissioned and disposed of at a recycling facility in accordance with the VEET Regulations and EPA requirements prior to certificate creation (see section 1.3.1 and 1.3.2 for further details).
Product criteria	A mains voltage downlight LED integrated luminaire that: • achieves a minimum light source efficacy level of 58 lumens/watt • has a minimum light output of 400 lumens • has a minimum lifetime rating of 15,000 hours • has a colour temperature that is, or is capable of being set to, warm white (2700K up to and including 3500K) or cool white (more than 3500K up to and including 4000K) • if the luminaire is to be installed in a dimmable circuit, is approved by the manufacturer as suitable for a dimmable circuit • in the case of a product installed in residential premises, has a minimum beam angle of 40 degrees when determined in accordance with IEC/TR 61341 Edition 2.0 • has a minimum power factor of 0.55 • is listed on the Register of Products by the time VEECs are created.

Requirements	Description
Training/licensing	Installers must be a licensed electrician (also known as an 'A Grade' electrician). Work may also be performed by the holder of a supervised worker's licence (L) or (ES) (i.e. apprentices) provided they are effectively supervised by an A Grade electrician in accordance with the guidance outlined in Energy Safe Victoria's supervising framework.[14]
Eligible environments and installation limits	• Lamp must be installed in a light fitting that is connected to an electricity supply before installation, and operable after the installation • Residential premises — one lamp per luminaire at premises • Business/non-residential premises — one lamp per luminaire at premises.

[14] In particular, the elements of effective supervision outlined in https://www.esv.vic.gov.au/technical-information/electrical-installations-and-infrastructure/electrical-technical-guidelines-and-determinations/requirements-for-the-effective-supervision-of-apprentice-electricians/

Requirements	Description
Evidence	For each installation you must collect and maintain the following: • VEEC assignment form completed and signed by the installer (i.e. 'A grade' electrician) and consumer. The installer (i.e. 'A grade' electrician) must sign the form at the installation premises. • Invoice/proof of purchase listing the: – installed product brand and model – purchaser's name and address • For business or non-residential upgrades, the invoice for the upgrade must include: – the name and address of the energy consumer – the Australian Business Number/Australian Company Number (ABN/ACN) of the energy consumer (where relevant) – the installation address (if different to the energy consumer) – the name, address and ABN of the installer business • Recycling invoice[15] clearly showing: – an itemised breakdown of the disposed lighting equipment – the date of collection • Stock reconciliation itemising the disposed lighting equipment decommissioned per upgrade site in kilograms to establish a link between each upgrade site and the recycling invoice • Geo-tagged photo(s): – of each upgrade space showing the inefficient lamps and/or fittings in each area before removal from their original position – showing the quantity of removed lamps – showing all models of upgrade lamp products including all relevant markings • Certificate of Electrical Safety listing all wiring work conducted.

[15] From 1 July 2019, EPA requires that all e-waste in Victoria must be provided to an e-waste service provider. Please refer to section 1.3.1 for further information.

Glossary

Term	Definition
CFL	Compact fluorescent lamp
Cool white	A colour temperature above 3500 Kelvin up to and including 4000 Kelvin.
Decommission	Disable and render permanently unusable.
Flue or chimney balloon	A device that, when inflated, is intended to block the movement of air in a chimney or flue.
Incandescent GLS lamp	An incandescent lamp designed for general use.
Incandescent lamp	A lamp in which light is produced by means of an element heated to incandescence by means of an electric current.
LED	Light emitting diode
LED integrated luminaire	A product that contains a LED device and the equipment required to distribute, filter or transform the light being transmitted and includes: • all parts necessary for supporting, fixing and protecting the product and for connecting the product to the electricity supply • any lighting control device for the product.
LED lamp with integrated driver	A self-ballasted LED module, incorporating control gear and any additional elements necessary for stable operation, that is designed for direct connection to an electricity supply.
Licensed electrician	Licensed electrician means an A Grade electrician licensed under the Electricity Safety Act 1998 to carry out electrical work.
Light output	The luminous flux emitted by a lamp or luminaire measured in lumens.
Light source	In relation to a non-integrated luminaire, is the lamp fitted to the luminaire, or in relation to a LED integrated luminaire, is the whole luminaire.
Light source efficacy	The initial luminous flux of a light source 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 light source but excluding any remote ballast and control gear power losses.
Luminaire	A non-integrated luminaire or a LED integrated luminaire.
Reflector lamp	A lamp in which part of the bulb is coated with reflective material in order to direct light.
Residential premises	A building classified as a Class 1, 2, 3 or 4 building under Part A3 of Volume One of the Building Code.
Total U-value	Total U-value means the thermal transmittance (W/m^2K) of the composite element allowing for the effect of any airspace and associated surface resistances.
Tungsten filament lamp	An incandescent lamp whose luminous element is a filament of tungsten.

Term	Definition
Tungsten halogen lamp	A gas-filled lamp that contains halogens or halogen compounds and a filament of tungsten.
VEEC	Victorian energy efficiency certificate created under section 17 of the Victorian Energy Efficiency Target Act 2007.
Warm white	A temperature of at least 2700 Kelvin up to and including 3500 Kelvin.
Warranty	A warranty against defects.
WERS	The Window Energy Rating Scheme managed by the Australian Window Association.
Window	Includes glass roof light, glass panel, glass block, glass brick, glazed sash, glazed part of a door or similar glass product that, when closed, transmits natural light but does not include a louvered product.

Appendix A: Lead generation requirements

All accredited persons (AP) undertaking installations under activities 15, 17, and 21 must:

- provide us with details of the service level agreements with your lead generator and sales organisations clearly showing your relationship with these organisations
- provide us with the following information on a weekly basis (by COB each Monday) via veu@esc.vic.gov.au:
  - lead generator and sales organisations you have used in the previous week to undertake doorknocking activities [and the postcodes targeted]
  - the lead generators and sales organisation you propose to use in the coming week to undertake doorknocking activities [and the postcodes targeted]
- ensure that all lead generators, salespeople and installers:
  - inform the consumer the VEU program is a ***voluntary*** government initiative and that consumers can learn more about the program at the commission website, www.esc.vic.gov.au/veu
  - do not make false or misleading claims such as claiming they work for, or on behalf of, the Victorian Government
  - inform the consumers of their name, and the name and address of the AP or installer company they represent
- ensure that all doorknocking lead generators wear an ID
- ensure that all telemarketers comply with the Telecommunications (Telemarketing and Research Calls) Industry Standard 2017

You should also review section 2.4 of the Obligations and Program Guide for Accredited Persons which lists the key Australian Consumer Law requirements you must comply with when engaging in marketing practices under the program.

Appendix B: Minimum phone and field audit requirements for Activities 15, 17 and 21

Accredited person internal audits

We recommend that accredited persons undertake internal audits to ensure that VEECs are created in compliance with the legislation and evidence requirements governing the VEU program. Your implementation of service and quality assurance measures is necessary to uphold the integrity of the VEU program.

You are assigned a risk rating by the commission upon accreditation. Based on this rating, where undertaking a prescribed activity deemed to be 'high risk', you are required to audit a certain percentage of these upgrades.

Minimum audit and compliance requirements

Outlined below are the minimum evidence requirements that should be collected by you during internal audits. The more detailed your audit, the greater assurance you will gain that installers are carrying out prescribed activities in accordance with the requirements of the program.

This activity guide does not provide an exhaustive list of all information that you should gather in all instances and is recommended for use as a guide only. Changing circumstances, such as new prescribed activities and new business environments, may result in the need to collect information beyond what is listed in this activity guide.

You are responsible for being responsive to changing circumstances and altering your internal audit regimes where necessary, in order to maintain suitable levels of assurance.

If in doubt, you should contact the commission to discuss acceptable quality assurance measures.

General requirements applicable to Activities 15, 17 and 21

For phone and field audits, you should verify:

- the name of the resident/business
- the address of the resident/business
- whether the resident/authorised signatory was present at the time of the installation
- the number of rooms/levels in the residence/premises
- whether the resident/business had ever previously had the same activity performed at the residence/premises
- whether a copy of all relevant documents were provided to the resident/authorised signatory.

Specific field and phone audit requirements

Activity 15: Weather sealing

For phone and field audits, you should verify or determine:

- the total number of products physically installed into the premises per product type
- if the products were all physically installed by the installer. If not, why?
- if any spares were provided. If so, how many?
- if any of the areas were previously sealed. If so, how many?
- if products were installed in premises with open flue gas space heater(s) and/or flueless gas space heater(s). If so, was consumer provided with information on:
  - the importance of ensuring adequate ventilation when using their gas heater to ensure its safe use, and
  - advice that a licensed gasfitter should be engaged to check the safe operation of the appliances as part of weather sealing upgrades?
- if the installer provided instructions on how to use the installed product (e.g. manufacturer's instructions)
- if any sealing products had been removed or were no longer being used by the resident. If so, how many and why?
- if the door seals were installed on internal or external doors (Activity 15A)
- if any of the door seals impair the normal operation of the door (Activity 15A)
- if the window seals were installed on external windows (Activity 15B)
- if the window seals impair the normal operation of the window (Activity 15B)
- whether the installation required wiring work to be undertaken, and whether a qualified electrician conducted the installation (Activities15C and 15D)
- if the installer undertaking the installation was a qualified electrician (Activity 15D)
- if wiring work was undertaken and, if so, whether the resident/business was supplied with a Certificate of Electrical Safety (Activities 15C and 15D)
- whether the sealing product allows airflow when fan is in use and restricts airflow when not operating and expels air outside or into the roof space of the premises (Activity 15C and 15D)
- if wall seals were installed on unsealed wall vents (Activity 15E)
- whether the chimney or flue is attached to a chimney used to burn solid fuel and restricts the airflow when closed (Activity 15F and Activity 15G)
- if any chimneys or flues had previously been sealed. If so, how many? (Activities 15F and 15G)
- if a chimney or flue sealing product has been installed (Activity 15G)
- if the sealing product was fitted to the ceiling outlet of a unsealed ducted evaporative cooling system and restricts the airflow from inside the premises (Activity 15H)
- any other comments or issues.

Activity 17: Low flow shower rose

For phone and field audits, you should verify or determine:

- the total number of shower rose/s physically installed into the residence/premises
- if the shower rose/s were all physically installed by the installer. If not, why?
- if the consumer knew the removed shower rose/s was low flow
- who originally installed the removed shower rose/s? Was it installed by the consumer or a plumber during a renovation or when the home was built?
- when was the removed shower rose/s installed?[16]
- the total number of bathrooms in the premises
- if any spares were provided. If so, how many?
- if the existing shower roses were removed from the premises. If not, why?
- any other comments or issues.

Activity 21: Incandescent lighting

For phone and field audits, you should verify or determine:

- the total number of LED lamps physically installed into the premises
- the total number of LED lamps physically installed into each room/area of the premises and the types of existing lamps, to ensure compliance with the VEET Regulations. For example:
  - Activity 21B - 10 external incandescent reflector flood light (compliant), 2 external incandescent GLS lamp (non-compliant)
- if the LED lamps were all physically installed by the installer? If not, how many and why?
- if any spare LED lamps were provided. If so, how many?
- if any existing LED lamps were replaced with LED lamps. If so, how many?
- if any unapproved (non-dimmable) LED lamps were installed into dimmable circuits. If so, how many?
- if any of the LED lamps had experienced flickering/failure. If so, how many? (Activities 21C, 21D, 21E and 21F)
- if the existing transformers were replaced by the installer. If so, how many? (Activities 21C and 21D)
- if any existing transformers were replaced by the installer, to distinguish if the claim is being made for the correct sub-schedule (Activities 21E and 21F)

[16] It Is a requirement of AS/NZS 3500.1 and AS/NZS 3500.4 that the maximum flow rate from an outlet for a shower, basin, kitchen sink or laundry trough must not exceed 9L/min, from June 2014.

- if the existing lamps were taken away for decommissioning and confirm the quantity and types of lamps decommissioned
- if the installer explained the installation process to the consumer and did a pre-installation check, including incompatible lamp/transformer combinations (Activity 21C)
- if the installer undertaking the installation was a licensed electrician (Activities 21A, 21C, 21D, 21E and 21F)
- if the licensed electrician conducted a pre-installation safety and compatibility inspection of all lamps and transformers (Activity 21C)
- if wiring work was undertaken and, if so, whether the resident/business was supplied with a Certificate of Electrical Safety
- any other comments or issues.

Appendix C: Additional guidance for activity 17

What roses are eligible for replacement?

Activity 17 requires that a shower rose must have a flow rate that exceeds 9L/min to be eligible for replacement.

Activities will not be accepted where the shower rose that has been installed has the same or similar flow rate as the one removed. This is because there is no energy efficiency upgrade occurring in that scenario.

Below is a non-exhaustive list of some common shower roses that are efficient so are not eligible for replacement

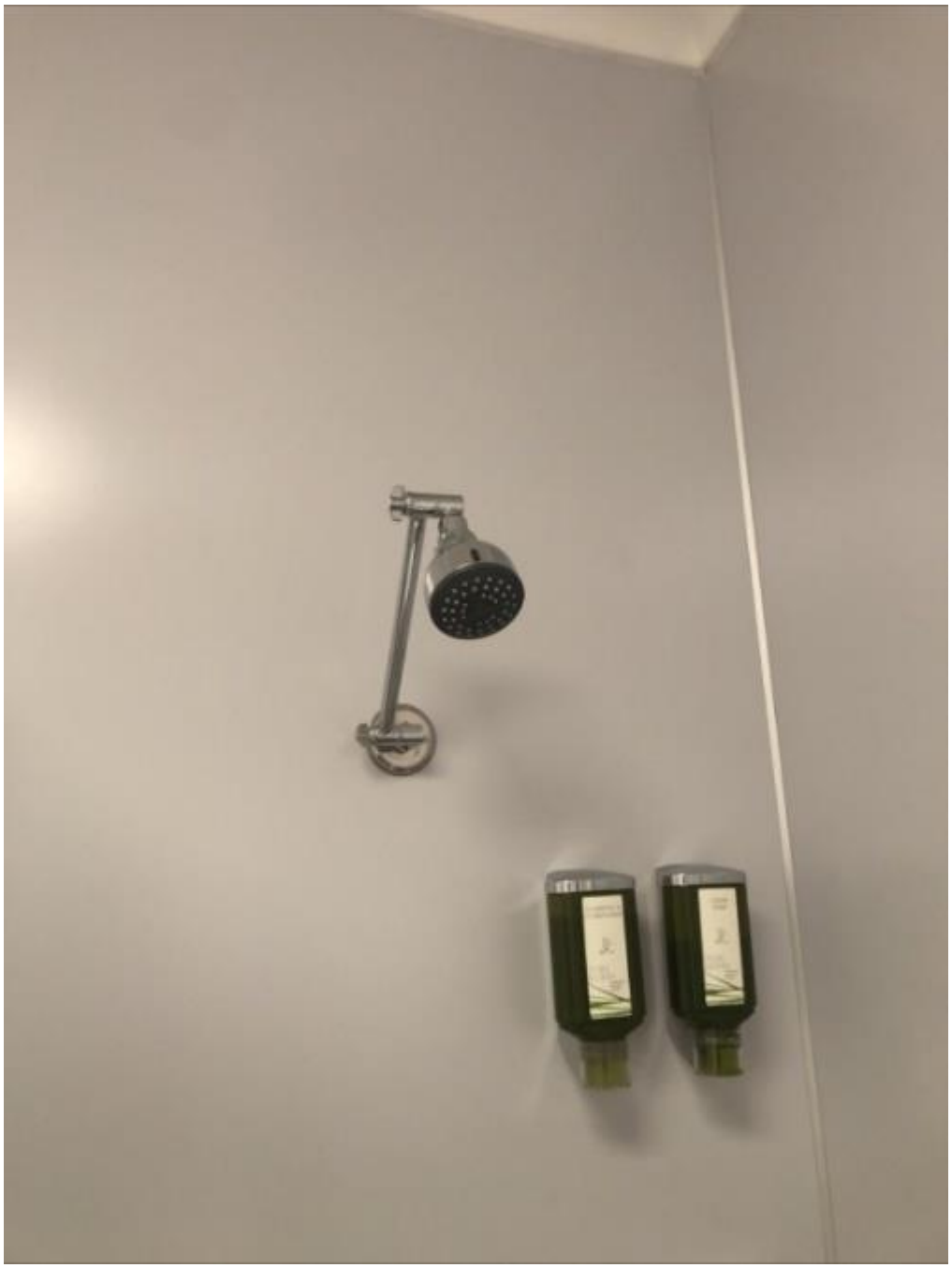
Examples of ineligible efficient shower roses

Model **Flow rate**	**Photo of rose**	**Model** **Flow rate**	Photo of rose
Lyrio HS066 6.5L/min		Lyrio HS069 7.5L/min	
Lyrio TS016 7L/min		Lyrio TS009 7L/min	

Perfectflow Ultimate/ Premier 6L/min		Brewers RJ1AD 7.5L/min	
Flexispray FLX242 Eco6 1F 6L/min		Flexispray Cascade 1F 7.5L/min	

Example of new photo evidence requirements

The photo below is an example of a shower rose in its original position with the face of the rose clearly visible.



Document Version History – C/18/16807

Version	Amendments	Date published
1.0	First release	10 December 2018
1.1	Clarification to photograph requirements for activities 21A to 21F	31 January 2019
1.2	Release of training/licensing requirements for activity 21A Clarification on installation of non-omni directional lamps for activity 21A	12 February 2019
1.3	Clarification of licensed electrician requirement and audit requirements for activity 21	4 April 2019
1.4	Update to extend period allowing non omni-directional lamps under activity 21A to be installed until 31 July 2019	1 May 2019
2.0	Update to: • incorporate 10 June 2019 specification amendments • remove activity 28 (moved to another activity guide)	10 June 2019
2.1	Update to: • reflect introduction of EPA's e-waste policy and associated update to decommissioning evidence. • include additional lead generation requirements for Activity 21A in Appendix B	1 July 2019
2.2	Update to: • clarify eligible environment requirements for activity 21 • clarify sign-off requirement on VEEC assignment forms for activities 21A, 21C, 21D, 21E and 21F • remove transition arrangements/requirements in respect of installation of non-omni directional lamps	29 August 2019
2.3	Update to outline criteria for use of appendix(s) with Certificate of Electrical Safety in common requirements	28 November 2019
2.4	Clarification that recycling invoice does not need to be provided to us prior to certificate creation, but upon request.	21 April 2020
2.5	Update to Appendix B (lead generation requirements) and Appendix C (audit requirements for shower rose)	2 December 2020
2.6	Update to reflect change in MST course units	22 January 2021
2.7	Update to clarify ABN/ACN evidential requirements	1 April 2021
2.8	Update to activity 17 evidence requirements and addition of Appendix D for guidance	29 April 2021
2.9	Update to activity 21 to align with the updated VEU specifications (version 9.0)	1 August 2021
3.0	Update to reflect waste framework from new EPA Act	1 February 2022

3.1	Update to activities 12, 13 and 15 to align with VEU Specifications - 13.0	19 September 2022
3.2	Update to weather sealing activity to provide updated guidance on weather sealing upgrades in premises with open flue gas appliances	16 January 2023
3.3	Update to remove activity 21 from the program to reflect VEU specifications – version 14.0	31 January 2023