

22572VIC

# Course in Retrofitting for Energy and Water Efficiency

This course is accredited under  
Part 4.4 of the Education and Training Reform Act 2006

**Accredited for the period 1 January 2021 to 31 December 2025**

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## Section A: Copyright and course classification information

<p><b>1. Copyright owner of the course</b></p>	<p>Copyright of this material is held by the Department of Education and Training (DET) Victoria. © State of Victoria (Department of Education and Training) 2021.</p>
<p><b>2. Address</b></p>	<p>Executive Director Engagement, Participation and Inclusion Division Higher Education and Skills Department of Education and Training (DET) GPO Box 4367 MELBOURNE Vic 3001</p> <p><b>Organisational Contact:</b> Manager, Training Products Unit Higher Education and Skills Telephone: 131823 Email: <a href="mailto:course.enquiry@education.vic.gov.au">course.enquiry@education.vic.gov.au</a></p> <p><b>Day to day contact:</b> Paul Saunders Curriculum Maintenance Manager (CMM) General Manufacturing Chisholm Institute PO Box 684, DANDENONG, Victoria, 3175 Telephone (03) 9238 8448 Email: <a href="mailto:paul.saunders@chisholm.vic.edu.au">paul.saunders@chisholm.vic.edu.au</a></p>
<p><b>3. Type of submission</b></p>	<p>Re-accreditation</p>
<p><b>4. Copyright acknowledgement</b></p>	<p>Copyright of this material is held by the Department of Education and Training (DET) Victoria. © State of Victoria (Department of Education and Training) 2021.</p> <p>This work is licensed under a Creative Commons Attribution-No Derivs 3.0 Australia licence. Licence available <a href="#">here</a>.</p> 
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<b>6. Course accrediting body</b>	Victorian Registration and Qualifications Authority
<b>7. AVETMISS information</b>	<p><b>ANZSCO code – 6 digit</b>          Australian and New Zealand Standard Classification of Occupations: 821412 Home Improvement Installer</p> <p><b>ASCED Code – 4 digit</b>          Field of Education: 0403 Building</p> <p><b>National course code</b>          22572VIC</p>
<b>8. Period of accreditation</b>	1 January 2021 to 31 December 2025



## Section B: Course information

<b>1. Nomenclature</b>		<b>Standard 1 AQTF Standards for Accredited Courses</b>
<b>1.1 Name of the qualification</b>	Course in Retrofitting for Energy and Water Efficiency	
<b>1.2 Nominal duration of the course</b>	15 nominal hours	
<b>2. Vocational or educational outcomes</b>		<b>Standard 1 AQTF Standards for Accredited Courses</b>
<b>2.1 Purpose of the course</b>	<p>This course provides the skills and knowledge required to undertake a range of retrofitting activities to reduce energy and water usage. Course outcomes include:</p> <ul style="list-style-type: none"> <li>• effective communication with property owner/occupiers</li> <li>• identification of hazards and risk control measures</li> <li>• replacement and installation of retrofitting products</li> </ul> <p>It also serves as an introduction to concepts of sustainability.</p> <p>Retrofitters who complete this course will not be engaged in building and construction work, and will not undertake tasks normally completed by a qualified tradesperson.</p>	
<b>3. Development of the course</b>		<b>Standards 1 and 2 AQTF Standards for Accredited Courses</b>
<b>3.1 Industry/enterprise / community needs</b>	<p>The Victorian Essential Services Commission (ESC) is responsible for the regulation of participants and products in the Victorian Energy Upgrades (VEU) program. This program aims to reduce energy and water usage in Victorian properties. The replacement (retrofitting) of lighting, shower roses and installation of weather sealing products is one way of achieving the program's aim. To ensure this is done competently, the ESC mandates the training required for retrofitting activities.</p> <p>In requesting the reaccreditation of this course the ESC stated that:</p> <p>“As long as these activities remain in the program (VEU), and their risk profile does not substantially change, businesses participating in the program may still need new retrofitters to undertake this course to fulfil their training obligations.” (ESC 2020)</p> <p>All activities under the VEU program must be undertaken by entities and staff registered with, and approved by the ESC.</p>	

	<p>143 registered installers undertook activities under the VEU program during 2019. Installers employ retrofitting staff to carry out this work. Industry stakeholders indicate that there is considerable turnover of retrofitting staff. It is therefore anticipated that there will be ongoing demand for this course.</p> <p>Future demand for the course is dependent on the requirements of the VEU program, the requirements of similar schemes in other jurisdictions and more generally on government policies relating to reduced energy and water usage.</p> <p><i>Course consultation involved:</i></p> <ul style="list-style-type: none"> <li>• formation of a Project Steering Committee (PSC) to oversee the course review process</li> <li>• a review of the skills and knowledge profile</li> <li>• discussion with key stakeholders</li> <li>• review and feedback from Accreditation Advisors</li> <li>• desktop review of enrolments</li> <li>• desktop industry research</li> </ul> <p>This course provides the skills and knowledge to undertake retrofitting activities. Retrofitters liaise with owner/occupiers and then replace inefficient 'technologies' with new and more efficient products to reduce energy and / or water usage.</p> <p>Possible employment is with organisations participating in the Victorian Energy Upgrades (VEU) program or similar initiatives in other States and Territories.</p> <p>Such organisations may be local councils, social enterprise organisations, private companies, contractors and utility / maintenance companies that offer services to owner / occupiers to help them reduce the energy and water usage at their properties.</p> <p>Target groups for the course are new employees and existing employees (retrofitters) of</p> <ul style="list-style-type: none"> <li>• registered installers approved and regulated by the Victorian Essential Services Commission, and;</li> <li>• other entities providing retrofitting services to reduce energy or water usage.</li> </ul> <p>The scope of retrofitting activities is limited to</p> <ul style="list-style-type: none"> <li>- replacing light globes</li> <li>- replacing shower roses</li> <li>- installing weather sealing products.</li> </ul> <p><b>Project Steering Committee</b></p>
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	<p>Bruce Page (Chair) Director, Energy Makeovers Industry Subject Matter Expert</p> <p>Neil Fraser Acting Director of Energy Safety and CEO, Energy Safe Victoria Safety advisor</p> <p>SteveKostoff/ Caz Saunders CEO, Green Business Audit and Training Trainers</p> <p>Chander Girdhar Director, Aussie Greenmarks (LED and Solar Specialist). Industry Subject Matter Expert</p> <p>Maureen Goey Manager Planning &amp; Development – Victorian Energy Upgrades, Essential Services Commission (ESC)</p> <p>Kaushie Jaya Project Officer Audit &amp; Compliance, Essential Services Commission (ESC)</p> <p><b>Project Coordination &amp; Administration:</b></p> <p>Paul Saunders Executive Officer, Curriculum Maintenance Manager Service (CMMS), General Manufacturing, Chisholm Institute.</p> <p>Dr Philip Davey Administrative Coordinator, CMMS General Manufacturing, Chisholm Institute.</p> <p>This course:</p> <ul style="list-style-type: none"> <li>• does not duplicate, by title or coverage, the outcomes of an endorsed training package qualification</li> <li>• is not a subset of a single training package qualification that could be recognised through one or more statements of attainment or a skill set</li> <li>• does not include units of competency additional to those in a training package qualification that could be recognised through statements of attainment in addition to the qualification</li> <li>• does not comprise units that duplicate units of competency of a training package qualification.</li> </ul>
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### 3.2 Review for re-accreditation

#### Course monitoring and evaluation

There have been over 400 enrolments since 2015 in *22311VIC Course in Retrofitting for Energy and Water Efficiency* and its predecessor *22005VIC Course in Retrofitting Homes for Energy and Water Efficiency*.

There were no enrolments 2018 – 2019; this may be due to the 'grandfathering' of mandatory training requirements by the ESC.

Course enrolments:

Course	2015	2016	2017	2018	2019	Total
22005VIC	341	-	-	-	-	341
22311VIC	-	21	62	0	0	83
<b>Overall total =</b>						<b>424</b>

Source: NCVET VOCSTATS 28/09/2020

Future demand for the course is very much dependent on government policy related to efficient energy and water usage. The Victorian Energy Targets are legislated until 2029 and it is therefore anticipated that there will be ongoing demand for this course over the period of accreditation.

The *22572VIC Course in Retrofitting for Energy and Water Efficiency* replaces and is equivalent to *22311VIC Course in Retrofitting for Energy and Water Efficiency*.

The *22311VIC Course in Retrofitting for Energy and Water Efficiency* is due to expire on 31 December 2020.

There can be no new enrolments in *22311VIC Course in Retrofitting for Energy and Water Efficiency* after 31 December 2020.

The new unit VU23076 was developed to replace VU21858 and VU21859 to remove the duplication between these units. VU23076 provides for the same vocational outcome as the two replaced units combined.

The following mapping table identifies the relationship between units from the previous course and the current course:

	Unit code and title from (superseded) 22311VIC	Unit code and title from (current) 22572VIC	Comment in relation to equivalent (E), not equivalent (NE), new (N)
	VU21858	NA	NE Unit revised and merged with VU21859 to create new unit VU23076
	VU21859	NA	NE Unit revised and merged with VU21858 to create new unit VU23076
	NA	VU23076	NEW unit. Incorporates and replaces outcomes of VU21858 & VU21859.
<b>4. Course outcomes</b> <i>Standards 1, 2, 3 and 4 AQTF Standards for Accredited Courses</i>			
<b>4.1 Qualification level</b>	22572VIC Course in Retrofitting for Energy and Water Efficiency meets an industry and community need, but does not have the breadth, depth or volume of learning of an Australian Qualifications Framework (AQF) qualification.		
<b>4.2 Employability Skills</b>	<i>Reference: Standard 4 AQTF Standards for Accredited Courses</i> Not Applicable		
<b>4.3 Recognition given to the course (if applicable)</b>	<i>Reference: Standard 5 AQTF Standards for Accredited Courses</i> Not Applicable		
<b>4.4 Licensing/regulatory requirements (if applicable)</b>	<i>Reference: Standard 5 AQTF Standards for Accredited Courses</i> No licensing, legislative, regulatory or certification requirements apply to this course at the time of publication.  Participants who wish to work as retrofitters in Victoria are required to be approved by the Victorian Essential Services Commission and complete mandatory safety training for specified VEU activities. VEU installer information is available <a href="#">here</a> .		

<b>Course rules</b>		<b>Standards 2, 6, 7 and 9 AQTF Standards for Accredited Courses</b>		
<b>5.1 Course structure</b>		To receive a Statement of Attainment for <i>22572VIC Course in Retrofitting for Energy and Water Efficiency</i> , the candidate must successfully complete one unit of competency:		
<b>Unit of competency code</b>	<b>Field of Education code (six-digit)</b>	<b>Unit of competency title</b>	<b>Pre-requisite</b>	<b>Nominal hours</b>
<b>Core units</b>				
VU23076	040399	Retrofit to improve energy and water efficiency	NA	15
<b>Total nominal hours</b>				<b>15</b>
<b>5.2 Entry requirements</b>		<p><b>Reference: Standard 9 AQTF Standards for Accredited Courses</b></p> <p>There are no formal entry requirements for this course, however learners enrolling in the <i>22572VIC Course in Retrofitting for Energy and Water Efficiency</i> would be best equipped to successfully undertake the course if they have language, literacy and numeracy skills equivalent to Australian Core Skills Framework (ACSF) Level 2.</p> <p>Learners with language, literacy and numeracy skills at lower levels than those suggested may require additional support to successfully undertake the course.</p>		

<b>6. Assessment</b>	<b>Standards 10 and 12 AQTF Standards for Accredited Courses</b>
<b>6.1 Assessment strategy</b>	<p><b>Reference: Standard 10 AQTF Standards for Accredited Courses</b></p> <p>All assessment, including Recognition of Prior Learning (RPL), must be compliant with the requirements of:</p> <ul style="list-style-type: none"> <li>• Standard 1 of the AQTF: Essential Conditions and Standards for Initial/Continuing Registration and Guidelines 4.1 and 4.2 of the VRQA Guidelines for VET Providers,</li> </ul> <p>or</p> <ul style="list-style-type: none"> <li>• the Standards for Registered Training Organisations 2015 (SRTOs),</li> </ul> <p>or</p> <ul style="list-style-type: none"> <li>• the relevant standards and Guidelines for RTOs at the time of assessment.</li> </ul> <p>Assessment methods and collection of evidence will involve application of knowledge and skills to the retrofitting sector.</p> <p>Assessment methods must include practical application and demonstration of the skills required by retrofitters and at least one of the following:</p> <ul style="list-style-type: none"> <li>▪ oral or written questioning</li> <li>▪ work-based projects</li> <li>▪ portfolio of evidence</li> </ul> <p>Assessment strategies must ensure that:</p> <ul style="list-style-type: none"> <li>• all assessments are valid, reliable, flexible and fair</li> <li>• learners are informed of the context and purpose of the assessment and the assessment process</li> <li>• feedback is provided to learners about the outcomes of the assessment process and guidance given for future options</li> <li>• time allowance to complete a task is reasonable and specified to reflect the industry context in which the task takes place.</li> </ul> <p>Registered Training Organisations (RTOs) must ensure that Recognition of Prior Learning (RPL) is offered to all applicants in determining competency.</p> <p>No mandatory workplace assessment applies to this course.</p>

<p><b>6.2 Assessor competencies</b></p>	<p><b>Reference: Standard 12 AQTF Standards for Accredited Courses</b></p> <p>Assessment must be undertaken by a person or persons in accordance with:</p> <ul style="list-style-type: none"> <li>• Standard 1.4 of the AQTF: Essential Conditions and Standards for Initial/Continuing Registration and Guidelines 3 of the VRQA Guidelines for VET Providers,</li> </ul> <p>or</p> <ul style="list-style-type: none"> <li>• the Standards for Registered Training Organisations 2015 (SRTOs),</li> </ul> <p>or</p> <ul style="list-style-type: none"> <li>• the relevant standards and Guidelines for RTOs at the time of assessment.</li> </ul>
<p><b>7. Delivery</b> <span style="float: right;"><b>Standards 11 and 12 AQTF Standards for Accredited Courses</b></span></p>	
<p><b>7.1 Delivery modes</b></p>	<p><b>Reference: Standard 11 AQTF Standards for Accredited Courses</b></p> <p>Strategies should be selected to reflect the nature of the unit and the needs of the participants.</p> <p>The course aims to develop practical competencies within an industry setting. Practical demonstrations and opportunity for application are considered to provide the most suitable strategy to reflect the objectives of the course.</p> <p>The knowledge component of the course may be delivered via face-to-face, classroom-based delivery, or flexibly in an on line or blended mode using a self paced or structured format.</p> <p>An emphasis on occupational health and safety (OHS) / work health and safety (WHS) and environmental considerations must be integrated and reinforced at all times.</p>
<p><b>7.2 Resources</b></p>	<p><b>Reference: Standard 12 AQTF Standards for Accredited Courses</b></p> <p>Resources must include:</p> <ul style="list-style-type: none"> <li>• products, tools and equipment to undertake retrofitting tasks, relevant legislative, regulatory and organisational documentation</li> <li>• Access to computers and internet as required</li> <li>• Access to real or simulated workplace</li> </ul>

	<p>Training must be undertaken by a person or persons in accordance with:</p> <ul style="list-style-type: none"> <li>Standard 1.4 of the AQTF: Essential Conditions and Standards for Initial/Continuing Registration and Guideline 3 of the VRQA Guidelines for VET Providers,</li> </ul> <p>or</p> <ul style="list-style-type: none"> <li>the Standards for Registered Training Organisations 2015 (SRTOs),</li> </ul> <p>or</p> <ul style="list-style-type: none"> <li>the relevant standards and Guidelines for RTOs at the time of assessment</li> </ul>
<b>8. Pathways and articulation</b>	<b>Standard 8 AQTF Standards for Accredited Courses</b>
	<p>There are no formal articulation arrangements at the time of accreditation. Individuals will receive credit for completing the unit of competency in this course if they enrol in further training where the unit is part of the qualification.</p> <p>This course provides for an introduction to concepts of sustainability. Upon successful course completion, graduates may wish to work towards a full qualification in sectors such as sustainability, energy efficiency and conservation.</p> <p><i>Refer to the AQF 2nd Edition, 2013 Pathways Policy <a href="#">here</a></i></p>
<b>9. Ongoing monitoring and evaluation</b>	<b>Standard 13 AQTF Standards for Accredited Courses</b>
	<p>The Curriculum Maintenance Manager (CMM), General Manufacturing, is responsible for the monitoring and evaluation of the <i>22572VIC Course in Retrofitting for Energy and Water Efficiency</i>.</p> <p>The <i>22572VIC Course in Retrofitting for Energy and Water Efficiency</i> will be reviewed at mid-point in the accreditation period. Evaluations will involve consultation with:</p> <ul style="list-style-type: none"> <li>course graduates</li> <li>Essential Services Commission (ESC) representative</li> <li>retrofitting industry representatives</li> <li>teaching staff</li> <li>assessors</li> </ul> <p>Any significant changes to the course resulting from course monitoring and evaluation procedures will be reported to the VRQA through a formal amendment process.</p>

## Section C—Unit of competency

Following is the unit of competency that has been developed for this course, and which complies with the current requirements from the Training Package Development Handbook as detailed in that section of the course document.

VU23076                      Retrofit to improve energy and water efficiency



<b>Unit code</b>	<b>VU23076</b>		
<b>Unit title</b>	<b>Retrofit to improve energy and water efficiency</b>		
<b>Unit Descriptor</b>	<p>This unit describes the outcomes required to retrofit energy and / or water saving products in residential and commercial properties to reduce energy and water consumption.</p> <p>Retrofitting activities are limited to product replacements or improvements that do not require the skills of qualified, registered or licensed tradespersons.</p> <p>No licensing, legislative, regulatory or certification requirements apply to this unit at the time of publication.</p>		
<b>Employability Skills</b>	This unit contains Employability Skills		
<b>Application of the Unit</b>	<p>This unit applies to those who work as retrofitters for the purposes of improving energy and water efficiency in residential and commercial properties where owner/occupiers give approval.</p> <p>Retrofitters work autonomously with limited supervision, sometimes as part of a small team. While work parameters are established, judgement is required to solve a variety of predictable and sometimes unpredictable problems. Responsibility for the quality of work outputs is expected.</p> <p>Achievement of competency in this unit is mandatory for retrofitters undertaking specified activities as part of the Victorian Energy Upgrades (VEU) scheme.</p>		
<b>ELEMENT</b>	<b>PERFORMANCE CRITERIA</b>		
<i>Elements describe the essential outcomes of a unit of competency.</i>	<i>Performance criteria describe the required performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the required skills and knowledge and/or the range statement. Assessment of performance is to be consistent with the evidence guide.</i>		
<b>1</b>	Promote retrofitting to owner/occupiers	1.1	Approach <b>owner/occupiers</b> and accurately explain the potential for energy saving, water saving and reduced costs through retrofitting
		1.2	Describe applicable <b>government initiatives</b> to owner/occupiers that support retrofitting to improve energy and water efficiency
		1.3	Discuss the <b>range of activities</b> that can be undertaken by retrofitters and those that must be performed by a <b>qualified, registered and/or licensed tradesperson or installer</b>



2	Prepare for retrofitting	2.1	Confirm owner/occupier approval to enter property to identify retrofit opportunities and potential hazards.
		2.2	Assess property to identify retrofitting requirements and any <b>hazards</b> which may impact on the retrofitting activities
		2.3	Identify <b>risk controls</b> in accordance with <b>legislation and organisational procedures</b>
3	Plan retrofitting	3.1	Plan efficient sequencing of retrofit activities and means of disposal or recycling of removed items
		3.2	Confirm the planned retrofitting activity with the owner/occupier, obtain their consent to proceed with retrofitting and complete relevant <b>documentation</b>
		3.3	Identify and select appropriate <b>tools and equipment</b> required for retrofitting activities
4	Undertake retrofitting	4.1	Remove existing products with caution to minimize potential damage to work area using appropriate tools and PPE in accordance with organisational procedures
		4.2	Clean and check work area and install <b>new products</b> using tools and equipment safely in accordance with manufacturer's instructions and organisational procedures
		4.3	Cease work and respond to <b>contingencies</b> to minimize harm to persons or property, in accordance with legislation and organisational procedures
		4.4	Report any accident, emergency or unforeseen hazards according to legislative, regulatory and organisational procedures
		4.5	Follow organizational procedures in the event of any damage to property
5	Finalise retrofitting	5.1	Test installed products to confirm correct operation according to manufacturer's specifications
		5.2	Demonstrate operation of installed products to owner/occupier and obtain confirmation that planned retrofitting activities have been completed
		5.3	Clean the work area, clean, check, and maintain tools and equipment according to manufacturers' instructions and organisational procedures

		5.4	Remove and dispose of PPE (as appropriate), and material waste in a sustainable manner in accordance with OHS/WHS regulations and environmental requirements
		5.5	Complete required documentation in accordance with organisational procedures.

<b>REQUIRED SKILLS AND KNOWLEDGE</b>
<i>This describes the essential skills and knowledge and their level, required for this unit.</i>
<p><b>Required Skills</b></p> <p>Communication skills to:</p> <ul style="list-style-type: none"> <li>• interact respectfully and effectively with others</li> <li>• read and interpret work place documentation</li> <li>• ask questions to gain relevant information</li> <li>• explain retrofitting activities, the benefits of conserving energy and water and the limitations of the retrofit activities that can be undertaken</li> <li>• explain the legislative, regulatory and organisational requirements under which retrofit activities take place</li> <li>• follow written or verbal work instructions</li> <li>• read and adhere to safety data sheets (SDSs) and organisational safe work method statements (SWMSs)</li> <li>• report OHS/WHS hazards according to legislative, regulatory and organisational requirements</li> <li>• complete required documentation</li> </ul> <p>Organisational skills to:</p> <ul style="list-style-type: none"> <li>• prepare tools, materials and equipment for retrofitting tasks</li> <li>• plan a work schedule and manage time effectively</li> </ul> <p>Problem solving skills to:</p> <ul style="list-style-type: none"> <li>• identify and report OHS/WHS hazards according to legislative, regulatory and organisational requirements</li> <li>• assess risks and implement controls according to legislative, regulatory and organisational requirements</li> <li>• adhere to common safety signs and symbols as used in workplace documents, instruction manuals</li> <li>• complete measurements and calculations for material requirements</li> <li>• test operation of newly installed products</li> </ul> <p>Learning skills to:</p>



- recognise the retrofitting activities that an installer may perform and those that must be performed by a qualified, registered and/or licensed tradesperson
- use and maintain hand tools, power tools and equipment safely and according to workplace and manufacturers' instructions

Initiative and enterprise skills to:

- identify any faults in tools or equipment
- maintain a clean and tidy work area
- identify opportunities to recycle waste

Teamwork skills to:

- work collaboratively with others

### Required knowledge

- basic principles of sustainability and the efficient use of water and energy
- benefits of retrofitting to increase energy and water efficiency
- basic customer service and effective communication principles
- role of rapport in establishing positive interaction with owner/occupiers
- location of work place documents and procedures
- significance of providing accurate information when interacting with owner/occupiers
- limitations and scope of retrofitter role
- applicable Commonwealth, state or territory OHS/WHS legislation, regulations and organisational OHS/WHS requirements
- responsibilities under OHS/WHS legislation
- legal responsibilities when providing advice about, and undertaking retrofitting activities
- common OHS/WHS hazards, risks and control measures associated with retrofitting (e.g. asbestos awareness, dust suppression measures, electrical hazards)
- OHS/WHS reporting requirements
- the basic principles of risk assessment and risk management for retrofitting activities
- relevant safety data sheets (SDSs) for materials and products used in retrofitting
- types, purposes and uses of personal protective equipment and clothing
- procedures for responding to and reporting OHS/WHS hazards and events (including accidents, incidents, emergencies, injuries, near misses and dangerous occurrences)
- requirements for a systematic approach to planning work activities
- the range and use of energy and water efficient products
- tools and equipment required for retrofitting
- metric system of measurement

- organisational safe work method statements (SWMS), Job Safety Analysis (JSAs), risk assessments
- types of recyclable waste material
- legislation relating to disposal and recycling of waste
- recycling procedures for waste
- duty of care responsibilities
- required personal presentation standards when working with owner/occupiers

<b>RANGE STATEMENT</b>	
<p><i>The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording in the Performance Criteria is detailed below. Add any essential operating conditions that may be present with training and assessment depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts.</i></p>	
<p><b>Owner/occupiers</b> may include:</p>	<ul style="list-style-type: none"> <li>• householder</li> <li>• tenant or lessee</li> <li>• property owner/s</li> </ul>
<p><b>Government initiatives</b> may include :</p>	<ul style="list-style-type: none"> <li>• Victorian Energy Upgrades (VEU) program</li> <li>• energy / water saving programs in jurisdictions outside Victoria</li> </ul>
<p><b>Range of activities</b> may include:</p>	<ul style="list-style-type: none"> <li>• replacing light globes</li> <li>• installing draught and air leakage seals</li> <li>• installing window coverings</li> <li>• replacing shower roses</li> <li>• providing energy saving devices</li> </ul>
<p><b>Qualified, registered and/or licensed tradesperson or installer</b> includes:</p>	<ul style="list-style-type: none"> <li>• plumber</li> <li>• electrician</li> <li>• glazier</li> <li>• builder</li> <li>• carpenter</li> <li>• insulation installer</li> <li>• heating/air-conditioning specialists</li> <li>• asbestos removal specialists</li> </ul>
<p><b>Hazards</b> may include:</p>	<ul style="list-style-type: none"> <li>• potential conflict with the owner/occupier</li> <li>• previous installation or damage that the retrofitter must address or work around</li> </ul>



	<ul style="list-style-type: none"> <li>• cramped spaces</li> <li>• electrical safety issues</li> <li>• falling objects</li> <li>• working at height</li> <li>• hazardous substances, materials (e.g. asbestos) and dangerous goods</li> <li>• biological products</li> <li>• broken metal</li> <li>• glass</li> <li>• leaking containers</li> <li>• heat that could burn or scald</li> <li>• objects (such as knives, sharps and syringes) that could penetrate the skin</li> <li>• hot and cold working environments, and extremes of temperature</li> <li>• manual handling (including carrying, lifting, pulling and pushing)</li> <li>• noise</li> <li>• plant and equipment</li> <li>• unplanned collapse</li> <li>• ultraviolet (UV) radiation</li> <li>• animals and pets</li> <li>• dust</li> <li>• uneven and/or slippery interior and exterior surfaces</li> <li>• removal of old technologies and working parts related to energy and water efficiency</li> <li>• work above two metre height maximum for ladder work</li> <li>• infectious diseases</li> <li>• fumes and gases</li> <li>• pest droppings</li> </ul>
<p><b>Risk controls</b> may include but are not limited to:</p>	<p>Compliance with:</p> <ul style="list-style-type: none"> <li>• Work Instructions and organisational procedures</li> <li>• Outcomes of Job Safety Analyses (JSAs)</li> <li>• Safe Work Method Statements (SWMS)</li> <li>• Standard Operating Procedures (SOPs)</li> <li>• Safety Data Sheets (SDSs)</li> </ul>

	<p>Use of:</p> <ul style="list-style-type: none"> <li>• Personal Protective Equipment (PPE)</li> </ul>
<p><b>Legislation and organisational procedures</b> may include:</p>	<ul style="list-style-type: none"> <li>• OHS/WHS Acts, Regulations and Codes of Practice</li> <li>• organisation's codes of conduct and safety, including duty of care considerations, organisational safe work method statements and job safety analysis</li> <li>• Standard Operating Procedures (SOPs)</li> <li>• relevant Australian Standards</li> <li>• telemarketing, door-to-door sales and marketing codes of conduct</li> <li>• installation and explanation requirements under relevant government initiatives</li> <li>• eWaste legislation</li> <li>• Australian Consumer Law (ACL)</li> </ul>
<p><b>Documentation</b> may include:</p>	<ul style="list-style-type: none"> <li>• owner / occupier consent</li> <li>• OHS/WHS report</li> <li>• retrofitting test operation checklist</li> <li>• waste material disposal report</li> <li>• energy efficiency certification</li> <li>• images / photographs</li> <li>• product tallies</li> </ul>
<p><b>Tools and equipment</b> may include:</p>	<ul style="list-style-type: none"> <li>• Tools: <ul style="list-style-type: none"> <li>– adjustable spanners</li> <li>– electric drill (battery operated or with residual current device protection)</li> <li>– hacksaw/saw</li> <li>– hammers</li> <li>– multi-grip pliers</li> <li>– screwdrivers</li> <li>– tape measure</li> <li>– glass paper</li> </ul> </li> <li>• Personal protective equipment (PPE): <ul style="list-style-type: none"> <li>– eye protection</li> <li>– gloves</li> <li>– foot/shoe/boot covers</li> <li>– hearing protection</li> <li>– protective, well-fitting clothing</li> </ul> </li> </ul>

	<ul style="list-style-type: none"> <li>- respiratory protection</li> <li>- safety footwear</li> <li>- UV-protective clothing and sunscreen</li> <li>• Equipment:             <ul style="list-style-type: none"> <li>- tarpaulins</li> <li>- ladder</li> <li>- extension cord and lamp</li> <li>- residual current device</li> <li>- step platform ladders</li> </ul> </li> </ul>
<p><b>New products</b> may include:</p>	<ul style="list-style-type: none"> <li>• Lighting:             <ul style="list-style-type: none"> <li>- compact fluorescent lamps (CFLs)</li> <li>- light-emitting diode (LED) lamps</li> <li>- other energy-saving lamps</li> </ul> </li> <li>• Draught and air leakage sealing:             <ul style="list-style-type: none"> <li>- caulking</li> <li>- covers for fans, evaporative air conditioners, wall vents and downlights</li> <li>- draught seals and weather seals on doors and windows</li> <li>- chimney seals</li> </ul> </li> <li>• Window coverings and treatments:             <ul style="list-style-type: none"> <li>- curtain pelmets</li> <li>- heat-shrink membrane</li> <li>- outside awnings</li> <li>- window blinds</li> </ul> </li> <li>• Water saving:             <ul style="list-style-type: none"> <li>- replacement shower roses</li> </ul> </li> <li>• Energy saving:             <ul style="list-style-type: none"> <li>- standby power controllers</li> <li>- energy or power meters</li> <li>- remote control power boards</li> <li>- master slave power boards</li> </ul> </li> </ul>
<p><b>Contingencies</b> may include:</p>	<ul style="list-style-type: none"> <li>• injury</li> <li>• emergencies e.g. fire</li> <li>• property damage</li> <li>• unforeseen hazards</li> </ul>

	<ul style="list-style-type: none"> <li>• confrontation with owner/occupiers</li> </ul>
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## EVIDENCE GUIDE

*The evidence guide provides advice on assessment and must be read in conjunction with the Performance Criteria, Required Skills and Knowledge and the Range Statement.*

<p><b>Critical aspects for assessment and evidence required to demonstrate competency in this unit</b></p>	<p>Assessors must be satisfied that the candidate can competently and consistently perform all elements of the unit as specified by the performance criteria using the required skills and knowledge.</p> <p>A person who demonstrates competency in this unit must be able to provide evidence of the ability to:</p> <ul style="list-style-type: none"> <li>• communicate effectively with owner/occupiers about retrofitting to explain the benefits, activities, applicable government initiatives and the operation of installed retrofit products</li> <li>• recognise hazards when assessing residential and commercial premises for retrofitting</li> <li>• safely undertake all retrofitting activities for water and energy efficiency</li> <li>• accurately complete all required documentation</li> </ul>
<p><b>Context of and specific resources for assessment</b></p>	<p>Resources for assessment must include:</p> <ul style="list-style-type: none"> <li>• real or simulated tasks covering all Elements and Performance Criteria</li> <li>• relevant legislative, regulatory and organisational documentation</li> <li>• products, tools and equipment to undertake retrofitting tasks</li> </ul>
<p><b>Method of assessment</b></p>	<p>Assessment methods must include practical application and demonstration of the skills required by retrofitters and at least one of the following:</p> <ul style="list-style-type: none"> <li>• oral or written questioning</li> <li>• work-based projects</li> <li>• portfolio of evidence</li> </ul> <p>It is recommended that where possible, assessment should take place in a real or simulated workplace.</p> <p>Supplementary evidence of competency may be obtained from relevant authenticated documentation from third parties, such as supervisors, team leaders or specialist training staff.</p>