



# **Gazetted Units of Competency**

# Drainage, Gas, Irrigation, Mechanical Services, Roofing, Sanitary, and Water

August 2021 V2



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### **Overview**

#### About

For every class of plumbing outlined in The *Victorian Plumbing Regulations 2018*, the VBA publishes a list of prescribed Units of Competency (units) for both registration and licensing purposes.

The document outlines the units published in April 2021 in the Victorian gazette for both registration and licensing in the following classes of plumbing:

- 1. Drainage Work
- 2. Gasfitting Work
- 3. Irrigation (Non-agricultural) Work
- 4. Mechanical Services Work
- 5. Roofing (Stormwater) Work
- 6. Sanitary Work
- 7. Water Supply Work

#### Qualifications that units are selected from

Registration	CPC32420 Certificate III in Plumbing
Licence	CPC40920 Certificate IV in Plumbing and Services

#### Training package rules for Certificate III in Plumbing

In compiling this document, the VBA has taken into consideration the training package rules for the new Certificate III in Plumbing. Appendix A outlines:

- 1. The training rules for this new qualification, and
- 2. The summary of the VBA elective selections by unit group.





#### **Common units – registration**

There are ten common units that apply to each class listed in this document. For clarity, the common units are also listed within main class that they apply to.

Unit code	Unit name	Unit group
CPCPCM2039	Carry out interactive workplace communication	Core
CPCPCM2040	Read plans, calculate quantities and mark out materials	Core
CPCPCM2041	Work effectively in the plumbing services sector	Core
CPCPCM2043	Carry out WHS requirements	Core
CPCPCM2045	Handle and store plumbing materials	Core
CPCPCM2046	Use plumbing hand and power tools	Core
CPCPCM2047	Carry out levelling	Core
CPCPCM3022	Weld polymer pipes using fusion method	Core
CPCPCM3024	Prepare simple drawings	Core
HLTAID011	Provide first aid	Core

Common units	10
Total units	10



### **Drainage Work**

#### **Common units - registration**

Unit code	Unit name	Unit group
CPCPCM2039	Carry out interactive workplace communication	Core
CPCPCM2040	Read plans, calculate quantities and mark out materials	Core
CPCPCM2041	Work effectively in the plumbing services sector	Core
CPCPCM2043	Carry out WHS requirements	Core
CPCPCM2045	Handle and store plumbing materials	Core
CPCPCM2046	Use plumbing hand and power tools	Core
CPCPCM2047	Carry out levelling	Core
CPCPCM3022	Weld polymer pipes using fusion method	Core
CPCPCM3024	Prepare simple drawings	Core
HLTAID011	Provide first aid	Core

#### **Class specific units - registration**

Units are listed by unit group, then alphabetically by unit code.

Unit code	Unit name	Unit group
CPCPCM2054	Carry out simple concreting and rendering	Core
CPCPCM3025	Install trench support	Core
CPCPDR2021	Locate and clear blockages	Core
CPCPDR2025	Install stormwater and sub-soil drainage systems and drain work site	Core
CPCPDR2026	Install prefabricated inspection openings and inspection chambers	Core
CPCPDR3021	Plan layout and install below ground sanitary drainage systems	Core
CPCPDR3023	Install on-site domestic wastewater treatment plants and disposal systems	Core
CPCPSN3025	Install pre-treatment facilities	Elective – group C

Common units	10
Class specific units	8
Total units	18



### **Gasfitting Work**

#### **Common units - registration**

Unit code	Unit name	Unit group
CPCPCM2039	Carry out interactive workplace communication	Core
CPCPCM2040	Read plans, calculate quantities and mark out materials	Core
CPCPCM2041	Work effectively in the plumbing services sector	Core
CPCPCM2043	Carry out WHS requirements	Core
CPCPCM2045	Handle and store plumbing materials	Core
CPCPCM2046	Use plumbing hand and power tools	Core
CPCPCM2047	Carry out levelling	Core
CPCPCM3022	Weld polymer pipes using fusion method	Core
CPCPCM3024	Prepare simple drawings	Core
HLTAID011	Provide first aid	Core

#### **Class specific units - registration**

Units are listed by unit group, then alphabetically by unit code.

Unit code	Unit name	Unit group
CPCCCM2012	Work safely at heights	Core
CPCPCM2048	Cut and join sheet metal	Core
CPCPCM2054	Carry out simple concreting and rendering	Core
CPCPCM2055	Work safely on roofs	Core
CPCPCM3021	Flash penetrations through roofs and walls	Core
CPCPCM3023	Fabricate and install non-ferrous pressure piping	Core
CPCPCM3025	Install trench support	Core
CPCPGS3048	Install gas pressure control equipment	Core
CPCPGS3049	Install gas appliance flues	Core
CPCPGS3051	Purge consumer piping	Core
CPCPGS3053	Disconnect and reconnect Type A gas appliances	Core
CPCPGS3054	Calculate and install natural ventilation for Type A gas appliances	Core
CPCPGS3056	Size and install consumer gas piping systems	Core
CPCPGS3059	Install LPG storage of aggregate storage capacity up to 500 litres	Core
CPCPGS3061	Install and commission Type A gas appliances	Core
CPCCCM3001	Operate elevated work platforms up to 11 metres	Elective – group A
CPCPCM2049	Cut using oxy-acetylene equipment	Elective – group A
CPCPCM2052	Weld mild steel using oxy-acetylene equipment	Elective – group A
CPCPGS3046	Install LPG systems in caravans, mobile homes and mobile workplaces	Elective – group B
CPCPGS3047	Install LPG systems in marine craft	Elective – group B
CPCPGS3052	Maintain Type A gas appliances	Elective – group B
CPCPGS3060	Install LPG storage of aggregate storage capacity exceeding 500 litres and less than 8 kl	Elective – group B

Common units	10
Class specific units	22
Total units	32



### Irrigation (non-agricultural) work

#### **Common units - registration**

Unit code	Unit name	Unit group
CPCPCM2039	Carry out interactive workplace communication	Core
CPCPCM2040	Read plans, calculate quantities and mark out materials	Core
CPCPCM2041	Work effectively in the plumbing services sector	Core
CPCPCM2043	Carry out WHS requirements	Core
CPCPCM2045	Handle and store plumbing materials	Core
CPCPCM2046	Use plumbing hand and power tools	Core
CPCPCM2047	Carry out levelling	Core
CPCPCM3022	Weld polymer pipes using fusion method	Core
CPCPCM3024	Prepare simple drawings	Core
HLTAID011	Provide first aid	Core

#### **Class specific units - registration**

Units are listed by unit group, then alphabetically by unit code.

Unit code	Unit name	Unit group
CPCPCM2054	Carry out simple concreting and rendering	Core
CPCPCM3023	Fabricate and install non-ferrous pressure piping	Core
CPCPCM3025	Install trench support	Core
CPCPWT3020	Connect and install storage tanks to a domestic water supply	Core
CPCPIG2021	Design domestic urban irrigation systems	Elective – group A
CPCPIG3021	Set out, install and commission irrigation systems	Elective – group A
CPCPIG3022	Install and commission domestic irrigation pumps	Elective – group A

Common units	10
Class specific units	7
Total units	17



### **Mechanical Services Work**

#### **Common units - registration**

Unit code	Unit name	Unit group
CPCPCM2039	Carry out interactive workplace communication	Core
CPCPCM2040	Read plans, calculate quantities and mark out materials	Core
CPCPCM2041	Work effectively in the plumbing services sector	Core
CPCPCM2043	Carry out WHS requirements	Core
CPCPCM2045	Handle and store plumbing materials	Core
CPCPCM2046	Use plumbing hand and power tools	Core
CPCPCM2047	Carry out levelling	Core
CPCPCM3022	Weld polymer pipes using fusion method	Core
CPCPCM3024	Prepare simple drawings	Core
HLTAID011	Provide first aid	Core

#### **Class specific units - registration**

Units are listed by unit group, then alphabetically by unit code.

Unit code	Unit name	Unit group
CPCCCM2012	Work safely at heights	Core
CPCPCM2048	Cut and join sheet metal	Core
CPCPCM2055	Work safely on roofs	Core
CPCPCM3021	Flash penetrations through roofs and walls	Core
CPCPCM3023	Fabricate and install non-ferrous pressure piping	Core
CPCCCM3001	Operate elevated work platforms up to 11 metres	Elective – group A
CPCPCM2049	Cut using oxy-acetylene equipment	Elective – group A
CPCPCM2052	Weld mild steel using oxy-acetylene equipment	Elective – group A
CPCPMS2021	Assemble mechanical services components	Elective – group E
CPCPMS3031	Fabricate and install steel pressure piping	Elective – group E
CPCPMS3032	Select and fit insulation and sheathing	Elective – group E
CPCPMS3035	Install and test ducting systems	Elective – group E
CPCPMS3036	Install air handling units	Elective – group E
CPCPMS3038	Install air conditioning control equipment	Elective – group E
CPCPMS3039	Maintain mechanical services equipment	Elective – group E
CPCPCM2053	Weld using metal arc welding equipment	Elective – group F
CPCPMS3033	Install small bore heating systems	Elective – group F
CPCPMS3034	Install and test medical gas pipeline systems	Elective – group F
CPCPMS3040	Install and maintain evaporative air-cooling systems	Elective – group F
CPCPMS3041	Install domestic solid fuel burning appliances	Elective – group F
UEECD0007	Apply work health and safety regulations, codes and practices in the workplace	Elective – group F
UEERA0049	Install and start up single head split air conditioning and water heating heat pump systems	Elective – group F
UEERA0059	Prepare and connect refrigerant tubing and fittings	Elective – group F
UEERA0064	Recover, pressure test, evacuate, charge and leak test refrigerants - split systems	Elective – group F



Common units	10
Class specific units	24
Total units	34



### **Roofing (Stormwater) Work**

#### **Common units - registration**

Unit code	Unit name	Unit group
CPCPCM2039	Carry out interactive workplace communication	Core
CPCPCM2040	Read plans, calculate quantities and mark out materials	Core
CPCPCM2041	Work effectively in the plumbing services sector	Core
CPCPCM2043	Carry out WHS requirements	Core
CPCPCM2045	Handle and store plumbing materials	Core
CPCPCM2046	Use plumbing hand and power tools	Core
CPCPCM2047	Carry out levelling	Core
CPCPCM3022	Weld polymer pipes using fusion method	Core
CPCPCM3024	Prepare simple drawings	Core
HLTAID011	Provide first aid	Core

#### **Class specific units - registration**

Units are listed by unit group, then alphabetically by unit code.

Unit code	Unit name	Unit group
CPCCCM2012	Work safely at heights	Core
CPCPCM2048	Cut and join sheet metal	Core
CPCPCM2054	Carry out simple concreting and rendering	Core
CPCPCM2055	Work safely on roofs	Core
CPCPCM3021	Flash penetrations through roofs and walls	Core
CPCPRF2023	Collect and store roof water	Core
CPCPRF3022	Fabricate and install roof drainage systems	Core
CPCPRF3023	Fabricate and install external flashings	Core
CPCPRF3024	Install roof components	Core
CPCCCM3001	Operate elevated work platforms up to 11 metres	Elective - group A
CPCPRF2022	Select and install roof sheeting and wall cladding	Elective - group D
CPCPRF3021	Receive roofing materials	Elective - group D
CPCPRF3025	Install roof coverings to curved roof structures	Elective - group D
CPCPRF3026	Install roof sheets, wall cladding and complex flashings	Elective - group D

Common units	10
Class specific units	14
Total units	24



### **Sanitary Work**

#### **Common units - registration**

Unit code	Unit name	Unit group
CPCPCM2039	Carry out interactive workplace communication	Core
CPCPCM2040	Read plans, calculate quantities and mark out materials	Core
CPCPCM2041	Work effectively in the plumbing services sector	Core
CPCPCM2043	Carry out WHS requirements	Core
CPCPCM2045	Handle and store plumbing materials	Core
CPCPCM2046	Use plumbing hand and power tools	Core
CPCPCM2047	Carry out levelling	Core
CPCPCM3022	Weld polymer pipes using fusion method	Core
CPCPCM3024	Prepare simple drawings	Core
HLTAID011	Provide first aid	Core

#### **Class specific units - registration**

Units are listed by unit group, then alphabetically by unit code.

Unit code	Unit name	Unit group
CPCCCM2012	Work safely at heights	Core
CPCCCM3001	Operate elevated work platforms up to 11 metres	Core
CPCPCM2048	Cut and join sheet metal	Core
CPCPCM2052	Weld mild steel using oxy-acetylene equipment	Core
CPCPCM2054	Carry out simple concreting and rendering	Core
CPCPCM2055	Work safely on roofs	Core
CPCPCM3021	Flash penetrations through roofs and walls	Core
CPCPDR2021	Locate and clear blockages	Core
CPCPSN3011	Plan the layout of a residential sanitary plumbing system and fabricate and install sanitary stacks	Core
CPCPSN3022	Install discharge pipes	Core
CPCPWT3026	Install and fit off sanitary fixtures, water services and adjust water service controls	Core
CPCPSN3025	Install pre-treatment facilities	Elective - Group C
CPCPSN3026	Install sewerage pumpsets	Elective - Group C

Common units	10
Class specific units	13
Total units	23



### Water Supply Work

#### **Common units - registration**

Unit code	Unit name	Unit group
CPCPCM2039	Carry out interactive workplace communication	Core
CPCPCM2040	Read plans, calculate quantities and mark out materials	Core
CPCPCM2041	Work effectively in the plumbing services sector	Core
CPCPCM2043	Carry out WHS requirements	Core
CPCPCM2045	Handle and store plumbing materials	Core
CPCPCM2046	Use plumbing hand and power tools	Core
CPCPCM2047	Carry out levelling	Core
CPCPCM3022	Weld polymer pipes using fusion method	Core
CPCPCM3024	Prepare simple drawings	Core
HLTAID011	Provide first aid	Core

#### **Class specific units - registration**

Units are listed by unit group, then alphabetically by unit code.

Unit code	Unit name	Unit group
CPCCCM2012	Work safely at heights	Core
CPCPCM2054	Carry out simple concreting and rendering	Core
CPCPCM2055	Work safely on roofs	Core
CPCPCM3021	Flash penetrations through roofs and walls	Core
CPCPCM3023	Fabricate and install non-ferrous pressure piping	Core
CPCPCM3025	Install trench support	Core
CPCPFS3031	Fabricate and install fire hydrant and hose reel systems	Core
CPCPWT3020	Connect and install storage tanks to a domestic water supply	Core
CPCPWT3021	Set out and install water services	Core
CPCPWT3022	Install and commission water heating systems and adjust controls and devices	Core
CPCPWT3025	Install water pumpsets	Core
CPCPWT3026	Install and fit off sanitary fixtures, water services and adjust water service controls	Core
CPCPWT3027	Install backflow prevention devices	Core
CPCCCM3001	Operate elevated work platforms up to 11 metres	Elective - Group A
CPCPCM2049	Cut using oxy-acetylene equipment	Elective - Group A
CPCPCM2052	Weld mild steel using oxy-acetylene equipment	Elective - Group A
CPCPFS3037	Install residential life safety sprinkler systems	Elective - Group A
CPCPFS3038	Test and maintain fire hydrant and hose reel installations	Elective - Group A
CPCPIG2021	Design domestic urban irrigation systems	Elective - Group A
CPCPIG3021	Set out, install and commission irrigation systems	Elective - Group A
CPCPIG3022	Install and commission domestic irrigation pumps	Elective - Group A
CPCPWT3024	Install and maintain domestic water treatment equipment	Elective - Group A
CPCPWT3028	Install property service	Elective - Group A
CPCPWT3029	Install water pipe systems	Elective - Group A



Common units	10
Class specific units	24
Total units	34



## Licence – Main classes

### **Common Units**

A set of five common units is gazetted for licensing in all plumbing classes.

The units are listed in the table below. For clarity, the common units are also listed within the licence listing for each main class.

#### **Common units**

Unit code	Unit name	Unit group
BSBESB402	Establish legal and risk management requirements of new business ventures	Core
CPCCBC4012	Read and interpret plans and specifications	Core
CPCPCM4011	Carry out work-based risk control processes	Core
CPCPCM4012	Estimate and cost work	Core
CPCPCM4015	Access and interpret regulatory requirements for the plumbing and services industry	Core

Common units	5
Total units	5



### **Drainage Work**

#### **Common units - licensing**

Unit code	Unit name	Unit group
BSBESB402	Establish legal and risk management requirements of new business ventures	Core
CPCCBC4012	Read and interpret plans and specifications	Core
CPCPCM4011	Carry out work-based risk control processes	Core
CPCPCM4012	Estimate and cost work	Core
CPCPCM4015	Access and interpret regulatory requirements for the plumbing and services industry	Core

#### **Class specific units - licensing**

Unit code	Unit name	Unit group
CPCPDR4011	Design and size sanitary drainage systems	Core
CPCPDR4012	Design and size stormwater drainage systems	Core
CPCPDR4013	Design and size domestic treatment plant disposal systems	Elective – group A

Common units	5
Class specific units	3
Total units	8



### **Gasfitting Work**

#### **Common units - licensing**

Unit code	Unit name	Unit group
BSBESB402	Establish legal and risk management requirements of new business ventures	Core
CPCCBC4012	Read and interpret plans and specifications	Core
CPCPCM4011	Carry out work-based risk control processes	Core
CPCPCM4012	Estimate and cost work	Core
CPCPCM4015	Access and interpret regulatory requirements for the plumbing and services industry	Core

#### **Class specific units - licensing**

Unit code	Unit name	Unit group
CPCPGS4011	Design and size consumer gas installations	Core

Common units	5
Class specific units	1
Total units	6



### Irrigation (non-agricultural) work

#### Common units - licensing

Unit code	Unit name	Unit group
BSBESB402	Establish legal and risk management requirements of new business ventures	Core
CPCCBC4012	Read and interpret plans and specifications	Core
CPCPCM4011	Carry out work-based risk control processes	Core
CPCPCM4012	Estimate and cost work	Core
CPCPCM4015	Access and interpret regulatory requirements for the plumbing and services industry	Core

#### **Class specific units - licensing**

Unit code	Unit name	Unit group
N/A	No class specific unit	N/A

Common units	5
Class specific units	0
Total units	5



### **Mechanical Services Work**

#### **Common units - licensing**

Unit code	Unit name	Unit group
BSBESB402	Establish legal and risk management requirements of new business ventures	Core
CPCCBC4012	Read and interpret plans and specifications	Core
CPCPCM4011	Carry out work-based risk control processes	Core
CPCPCM4012	Estimate and cost work	Core
CPCPCM4015	Access and interpret regulatory requirements for the plumbing and services industry	Core

#### **Class specific units - licensing**

Unit code	Unit name	Unit group
CPCPMS4011	Design, size and lay out heating and cooling systems	Elective – group A

Common units	5
Class specific units	1
Total units	6



### **Roofing (Stormwater) Work**

#### **Common units - licensing**

Unit code	Unit name	Unit group
BSBESB402	Establish legal and risk management requirements of new business ventures	Core
CPCCBC4012	Read and interpret plans and specifications	Core
CPCPCM4011	Carry out work-based risk control processes	Core
CPCPCM4012	Estimate and cost work	Core
CPCPCM4015	Access and interpret regulatory requirements for the plumbing and services industry	Core

#### **Class specific units - licensing**

Unit code	Unit name	Unit group
CPCPRF4011	Design and size roof drainage systems	Elective – group A

Common units	5
Class specific units	1
Total units	6



### **Sanitary Work**

#### **Common units - licensing**

Unit code	Unit name	Unit group
BSBESB402	Establish legal and risk management requirements of new business ventures	Core
CPCCBC4012	Read and interpret plans and specifications	Core
CPCPCM4011	Carry out work-based risk control processes	Core
CPCPCM4012	Estimate and cost work	Core
CPCPCM4015	Access and interpret regulatory requirements for the plumbing and services industry	Core

#### **Class specific units - licensing**

Unit code	Unit name	Unit group
CPCPSN4011	Design and size sanitary plumbing systems	Core

Common units	5
Class specific units	1
Total units	6



### Water Supply Work

#### **Common units - licensing**

Unit code	Unit name	Unit group
BSBESB402	Establish legal and risk management requirements of new business ventures	Core
CPCCBC4012	Read and interpret plans and specifications	Core
CPCPCM4011	Carry out work-based risk control processes	Core
CPCPCM4012	Estimate and cost work	Core
CPCPCM4015	Access and interpret regulatory requirements for the plumbing and services industry	Core

#### **Class specific units - licensing**

Unit code	Unit name	Unit group
CPCPWT4011	Design and size heated and cold-water services and systems	Core

Common units	5
Class specific units	1
Total units	6



# **Appendix A: Certificate III in Plumbing**

### **Training package rules**

#### **Occupational streams**

For this qualification, there are four occupational streams:

- 1 General Plumbing
- 2 General Plumbing Roofing
- 3 General Plumbing Mechanical
- 4 General Plumbing Roofing and Mechanical
- All students must complete units required to obtain the 'general stream' which includes learning for: Drainage, Gas, Sanitary and Water.

#### **Unit selection**

The qualification is divided into the following unit groups:

- Core units (which are mandatory for all students), and
- Six elective groups labelled A-F (some electives are listed in more than one elective group).

All students must complete the core units and meet the elective requirements for groups A-C to obtain to the 'General' occupational stream.

To obtain one of the other occupational streams, electives from groups D-F must be selected in line with the training package rules.

#### VBA unit selection by group

In selecting units for registration, the VBA has taken into account the training package rules for each occupational stream.

The tables on the following page provide a summary by elective group of the training package rules for each occupational stream and the number of electives that the VBA selected from each elective group.

This is a guide only and RTOs may choose to select units that appear in multiple groups from a different elective group.

#### Notes on changes to training package rules

- The training package rules for Release 3 allowed the selection of up to four additional elective units for each occupational stream.
- In Release 4, the training packaging rules were modified so that for each occupational stream:
  - o Additional elective units may be selected without restriction, and
  - Up to four elective units from the minimum requirements may be substituted from another elective group or other relevant qualification.



### Summary of VBA selection by unit group

\*The VBA has selected units **above** the minimum unit requirement for that unit group ^ The VBA has selected units **below** the minimum unit requirement for that unit group

#### **1** General Plumbing

	Training package rules	VBA selection
Total	58 min	60
Core	43	43
Total electives	15 min	17
Group A	8 min	11*
Group B	4 min 4	
Group C	3 min	2^

#### 2 General Plumbing – Roofing

	Training package rules	VBA selection	
Total	62 min	64	
Core	43	43	
Total electives	19 min	21	
Group A	8 min	11*	
Group B	4 min	4	
Group C	3 min	2^	
Group D	4 min	4	

#### **3** General Plumbing – Mechanical

	Training package rules	VBA selection	
Total	73 min	76	
Core	43	43	
Total electives	30 min	33	
Group A	8 min	11*	
Group B	4 min	4	
Group C	3 min	2^	
Group D	0	0	
Group E	7 7 7		
Group F	8 min	9*	

#### 4 General Plumbing – Roofing and Mechanical

	Training package rules	VBA selection	
Total	77	80	
Core	43	43	
Total electives	30 min	37	
Group A	8 min	11*	
Group B	4 min	4	
Group C	3 min	2^	
Group D	4 min	4	
Group E	7	7	
Group F	8 min	9*	



# **Appendix B: Document modification history**

Version	Released		Notes
1	May 2021	First version	
2	July 2021	Page 8:	Mechanical Services class specific units: Elective group corrected for CPCPMS3033 Install small bore heating; class specific table reordered
		Page 11:	Sanitary class specific units: Elective group corrected for CPCPCM2048 Cut and join sheet metal, CPCPSN3026 Install sewerage pumpsets and CPCPSN3025 Install pre-treatment facilities; class specific table reordered
		Page 22:	Wording amended to reflect training package rules that changed between Certificate III in Plumbing Release 3 and 4
		Page 23:	The maximum number of elective units that can be selected for each stream was removed in line with Release 4 training package rules
		Page 24:	Appendix B added

