



Australian Government

CPPSPS3002 Perform basic swimming pool and spa measurements and calculations

Release: 1

CPPSPS3002 Perform basic swimming pool and spa measurements and calculations

Modification History

Release 1.

Supersedes and is equivalent to CPPSPS3002A.

Unit of competency upgraded to reflect Standards for Training Packages 2012.

This version first released with CPP Property Services Training Package Version 6.0.

Application

This unit of competency specifies the skills and knowledge required to perform basic measurements and calculations in a range of workplace contexts.

It includes:

- planning for, performing and recording measurements
- performing calculations of quantity, area, volume, perimeter, dosing rates, flow rate and time
- interpreting graphical representations of mathematical information relating to swimming pools and spas.

It applies to swimming pool and spa technicians, and related industry professionals and specialists, with limited supervisory responsibilities who perform their duties alone or as members of a team.

No licensing, legislative, regulatory, or certification requirements apply to this unit of competency at the time of endorsement.

Pre-requisite Unit

Nil

Unit Sector

Swimming pool and spa servicing

Elements and Performance Criteria

Elements describe the essential outcomes.	Performance criteria describe what needs to be done to demonstrate achievement of the element.
1. Plan and prepare to perform basic swimming pool	1.1 Review and clarify task to perform basic swimming pool and spa measurements and calculations. 1.2 Confirm measurement requirements and select method for

and spa measurements and calculations.	achieving required result. 1.3 Select measuring and calculating equipment and check for accuracy.
2. Perform basic swimming pool and spa measurements and calculations.	2.1 Obtain and check basic measurements using established work practices, measuring equipment and personal protective equipment (PPE) to ensure safety and security of self, others and property. 2.2 Record basic measurements using appropriate measurement units. 2.3 Convert measurement values into different measurement units. 2.4 Perform and check basic calculations using online or electronic calculators and record results. 2.5 Interpret results of basic calculations to solve problems relating to swimming pool and spa servicing. 2.6 Clean measuring equipment and materials, check for serviceability and calibrate and store. 2.7 Minimise environmental impact of basic measurement and calculation activities and dispose of waste following workplace procedures.
3. Interpret basic mathematical information.	3.1 Recognise and interpret information represented in graphs, symbols, diagrams and pictures to complete workplace tasks. 3.2 Review limitations and risks associated with using inaccurate basic swimming pool and spa measurements and calculations.

Foundation Skills

This section describes the language, literacy, numeracy and employment skills essential to performance in this unit but not explicit in the performance criteria:

- reading skills to:
 - interpret task documentation
 - interpret information in symbols, diagrams, pictures, packaging labels and safety data sheets (SDSs) e.g. for dosing rates
- writing skills to record swimming pool and spa measurements and results of basic calculations
- numeracy skills to perform basic measurements and calculations and to record quantities of chemicals
- oral communication skills to use questioning to identify and confirm requirements

- technology skills to use measurement equipment and online or electronic calculators.

Unit Mapping Information

Supersedes and is equivalent to CPPSPS3002A Perform basic swimming pool and spa measurements and calculations.

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=6f3f9672-30e8-4835-b348-205dfcf13d9b>

Assessment Requirements for CPPSPS3002 Perform basic swimming pool and spa measurements and calculations

Modification History

Release 1.

Supersedes and is equivalent to CPPSPS3002A.

Unit of competency upgraded to reflect Standards for Training Packages 2012.

This version first released with CPP Property Services Training Package Version 6.0.

Performance Evidence

To demonstrate competency in this unit, a person must perform basic swimming pool and spa measurements and calculations, including:

- at each of two different locations, measure and calculate:
 - the dimensions, area, perimeter and volume of each of one regular and one irregular shaped swimming pool or spa with sloped floors
 - water loss in one swimming pool or one spa
 - the quantity of pool chemicals required to improve water quality in one swimming pool or spa
 - flow and turnover rates and time taken to fill and empty one swimming pool or spa.

In doing this, the person must meet the performance criteria for this unit.

Knowledge Evidence

To be competent in this unit, a person must demonstrate knowledge of:

- requirements and application of jurisdictional work health and safety (WHS) and environmental legislation and regulations relating to performing basic swimming pool and spa measurements and calculations, including safety data sheets (SDSs)
- workplace requirements for undertaking all aspects of performing basic swimming pool and spa measurements and calculations,
- selection and use of personal protective equipment (PPE) when performing basic swimming pool and spa measurements and calculations
- hazards, risks and enterprise safety procedures associated with measurements undertaken on site
- uses and limitations of measuring equipment, including:
 - bucket
 - calculator
 - ruler, including laser ruler
 - measuring flask
 - scales
 - stopwatch

- tape measure
- trundle wheel
- taking basic measurements in the swimming pool and spa industry, including units of measurement, types and functions of measuring equipment
- basic measurement requirements, including for:
 - flow rates
 - swimming pool or spa chemical quantities
 - swimming pool or spa dimensions
 - temperatures
- methods for conversion of units of measurement, including:
 - distance units of measurement:
 - metric conversions
 - metric to imperial units of measurement and vice versa
 - surface area units of measurement:
 - metric conversions
 - metric to imperial units of measurement and vice versa
 - volume units of measurement:
 - metric conversions
 - metric to imperial units of measurement and vice versa
 - weight units of measurement:
 - metric conversions
 - metric to imperial units of measurement and vice versa
- processes for taking basic measurements, including for calculating areas, perimeters and volumes of regular and irregular shapes relevant to measuring swimming pools and spas, such as rectangles, squares, cubes, circles, semi-circles, triangles, trapeziums and cylinders
- conversion of measurement units used in the swimming pool and spa industry, including: metric system conversions, metric to imperial conversion and vice versa
- graphical representations of mathematical information used in basic swimming pool and spa measurements and calculations, including diagrams, graphs, pictures and symbols
- water loss in swimming pools and spas, including:
 - evaporation
 - plumbing and shell leaks
 - user splash-outs and drag-outs
 - planned dilution, including:
 - total dissolved solids (TDSs) levels
 - user loads.

Assessment Conditions

Assessors must satisfy the requirements for assessors contained in the Standards for Registered Training Organisations.

Assessment of performance must be undertaken in the workplace or in a simulated workplace environment. Tasks are to be performed to the level of proficiency and within the time limits expected in a workplace.

Assessors are responsible for ensuring that the person demonstrating competency has access to:

- work site/s and specifications to perform basic swimming pool and spa measurements and calculations
- appropriate documents, safety data sheets (SDSs), measuring and calculating equipment and PPE currently used in industry
- requirements of appropriate sections of legislation and regulations
- relevant workplace policies and procedures.

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=6f3f9672-30e8-4835-b348-205dfcf13d9b>