# Unit of Competency CPCCOM1015 Carry out measurements and calculations

## Application

This unit of competency specifies the skills and knowledge required to undertake basic measurements and calculations to determine task and material requirements in a construction work environment.

A person working at this level would be expected to complete tasks assigned to them, under supervision.

Completion of the general construction induction training program specified by the model Code of Practice for Construction Work is required for any person who is to carry out construction work. Achievement of CPCCWHS1001 *Prepare to work safely in the construction industry* meets this requirement.

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

## Prerequisite Unit

Nil.

## Elements and Performance Criteria

| | | |
|---|---|---|
| 1. Obtain measurements. | 1.1 | Select most appropriate equipment and method for obtaining the measurement. |
| | 1.2 | Use a rule or tape to obtain linear measurements accurate to 1 mm. |
| 2. Perform basic calculations. | 2.1 | Take basic measurements and calculate quantities of materials in a construction environment, using basic formulae for each of: weight, area, volume, perimeter, circumference, ratio and percentage. |
| | 2.2 | Convert measurements in metres to millimetres and measurements in millimetres to metres. |
| | 2.3 | Check calculations for accuracy and record calculation workings and results. |

## Foundation skills

Foundation skills essential to performance are explicit in the performance criteria of this unit of competency.

## Unit Mapping Information

Supersedes and equivalent to CPCCCM1015 Carry out measurements and calculations.

## Links

Companion Volume Implementation Guide:
https://vetnet.education.gov.au/Pages/TrainingDocs.aspx?q=7e15fa6a-68b8-4097-b099-030a5569b1ad

# Assessment Requirements for CPCCOM1015 Carry out measurements and calculations

## Performance Evidence

To demonstrate competency, a candidate must satisfy all the elements, performance criteria and foundation skills of this unit by:

- taking basic measurements and performing basic calculations to determine quantities of materials for construction work using each of the following:
    - weight
    - area
    - volume
    - perimeter
    - circumference
    - ratio
    - percentage
- demonstrating converting measurements in metres to millimetres and measurements in millimetres to metres.

All work must be performed to the standard required in the workplace.

## Knowledge Evidence

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

- types of equipment required for planning and performing basic measurements and calculations and their characteristics, uses and limitations, including:
    - rulers
    - tape measures
    - digital measuring and calculating devices
- methods of calculating the area and volume of the following in a construction environment:
    - rectangles
    - squares
    - circles
    - triangles
    - trapeziums
    - cubes
    - cylinders.

## Assessment Conditions

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

This unit must be assessed in the workplace or a close simulation using realistic workplace conditions, materials, activities, responsibilities, procedures, safety requirements and environmental considerations.

## Links

Companion Volume Implementation Guide:
https://vetnet.education.gov.au/Pages/TrainingDocs.aspx?q=7e15fa6a-68b8-4097-b099-030a5569b1ad