



**Australian Government**

**Department of Education, Employment and Workplace Relations**

# **MSATMVER301A Verify simple measures**

**Revision Number: 1**

## MSATMVER301A Verify simple measures

### Modification History

Not applicable.

### Unit Descriptor

<b>Unit descriptor</b>	This unit of competency covers the ability to apply National Test Procedures to determine whether a class of simple measures is suitable for trade and then mark it accordingly. It also involves the installation and/or repair of simple measures.
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### Application of the Unit

<b>Application of the unit</b>	<p>This unit of competency is applicable to verifiers operating under a licence to test and mark specific classes of simple measures. Simple measures such as trade masses, length measures and volume measures are used in a wide variety of commerce including retail, hospitality, pharmaceuticals and laboratory services.</p> <p>Industry representatives have provided case studies to illustrate the practical application of this unit of competency and to show its relevance in a workplace setting. These are found at the end of this unit of competency under the section 'This competency in practice'.</p>
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### Licensing/Regulatory Information

Not applicable.

## Pre-Requisites

<b>Prerequisite units</b>		

## Employability Skills Information

<b>Employability skills</b>	This unit contains employability skills.
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## Elements and Performance Criteria Pre-Content

Elements describe the essential outcomes of a unit of competency.	Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the required skills and knowledge section and the range statement. Assessment of performance is to be consistent with the evidence guide.
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## Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
1. Install and repair simple measures	1.1. Access and correctly interpret information for installing or repairing simple measures 1.2. Select required components, tools and equipment in accordance with manufacturer/component supplier specifications 1.3. Perform installation or repair in accordance with legislation, industry codes of practice and organisational guidelines 1.4. Avoid damage to simple measures during installation or repair
2. Prepare for verification	2.1. Identify and evaluate the type of simple measure to be verified 2.2. Access and correctly interpret documentation required for the verification 2.3. Identify and access test equipment, products and consumables required for the verification 2.4. Liaise with the trader to provide the items required on site 2.5. Ensure specified test equipment is fit for purpose in accordance with applicable legislation and organisational procedures 2.6. Store and transport test equipment in accordance with organisational procedures and industry best practice 2.7. Identify relevant local workplace health and safety issues and implement appropriate control strategies
3. Evaluate simple measure performance	3.1. Evaluate whether the operating environment will impact on the performance of the simple measure 3.2. Modify the operating environment or implement alternative arrangements to ensure reliable test conditions as necessary 3.3. Identify the maximum permissible errors for the simple measure from the legislative requirements 3.4. Use test equipment safely in accordance with applicable legislation and organisational procedures 3.5. Check simple measure for compliance with the appropriate Certificates of Approval 3.6. Inspect simple measure in accordance with relevant National Test Procedure and appropriate National Measurement Institute policy

<b>ELEMENT</b>	<b>PERFORMANCE CRITERIA</b>
	3.7. Evaluate results against prescribed performance criteria and determine if the simple measure is suitable for trade use in accordance with legislative requirements
4. Report verification results	4.1. Display the verification result on the simple measure in accordance with legislative requirements 4.2. Use test reports to present verification results in the required format 4.3. Complete verification documentation in accordance with legislative requirements and organisational procedures 4.4. Communicate results within the specified time and in accordance with organisational guidelines
5. Model and encourage compliance with statutory requirements	5.1. Apply organisation's procedures and practices to meet licensing authority's requirements 5.2. Clarify any issues about licensing requirements with the licensing authority as they arise 5.3. Review work and seek feedback from others to confirm continuing compliance with licensing requirements 5.4. Identify implications of non-compliance with licensing requirements 5.5. Identify inadequacies in trader's procedures and practices which may contribute to non-compliance with licensing requirements and/or national measurement legislation 5.6. Explain inadequacies and possible remedial actions to trader
6. Maintain statutory records	6.1. Keep accurate and complete records in accordance with licensing requirements 6.2. Ensure authorisation, training and relevant licences are current in accordance with organisational and licensing requirements 6.3. Inform the licensing administering authority of changes to personal information as required by statute

## Required Skills and Knowledge

### REQUIRED SKILLS AND KNOWLEDGE

This section describes the skills and knowledge required for this unit.

#### Required skills

- diagnosing faults in simple measures
- installing and repairing simple measures
- accessing, interpreting and applying a range of documents for the verification of simple measures:
  - national measurement legislation
  - routine National Test Procedures
  - Certificates of Approval
  - National Measurement Institute verification policy
  - Australian Standards
- accessing and interpreting Certificates of Verification for a limited range of reference standards
- using routine communication and negotiation skills to:
  - explain the purpose of verification
  - inform traders of non-compliances and consequences of failing to rectify them
  - explain verification procedures and outcomes to traders and managers
- accessing, transporting, setting up, validating, using and maintaining a limited range of test equipment and reference standards
- identifying and evaluating environmental impacts on performance of a range of simple measuring instruments
- conducting tests and recording results with close attention to detail and accuracy
- performing calculations involving fractions, decimals, ratios, proportions and percentages
- using correct units and the correct number of significant figures
- analysing performance results over a single or limited range of operating conditions
- planning routine tasks
- developing/implementing an efficient verification strategy that has a limited impact on others
- demonstrating professionalism and maintaining the rights of the trader at all times
- solving routine/expected problems
- working safely

#### Required knowledge

- design and functions of components used in simple measures
- licensing requirements for a verifier including:
  - quality management system

**REQUIRED SKILLS AND KNOWLEDGE**

- licence conditions
- maintenance of statutory records
- general chemical and physic principles and concepts including:
  - weight, mass, gravity and density
  - temperature effects and coefficients of expansion
- basic knowledge of the operating procedures across a limited range of environments including laboratories, retail and manufacturing
- knowledge of metrological terms and terminology specific to simple measuring instruments such as:
  - maximum permissible errors
  - traceability, error of measurement
  - error of indication
- national measurement legislation applicable to simple measures
- detailed knowledge of National Test Procedures and operating procedures for equipment and reference standards used in job role including:
  - purpose of test
  - test conditions and possible environmental impacts on performance of simple measure
  - key preparation/measurement steps in test method
  - calculation steps to give results in appropriate units and precision
  - maximum permissible errors for simple measures under test
- procedures for completing verification documentation
- organisational policy and procedures for verifying simple measures

## Evidence Guide

<b>EVIDENCE GUIDE</b>	
<p>The Evidence Guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.</p>	
<b>Overview of assessment</b>	<p>Competency must be demonstrated in the ability to perform consistently at the required standard for one class of simple measures listed in the Range Statement.</p>
<b>Critical aspects for assessment and evidence required to demonstrate competency in this unit</b>	<p>Assessors should ensure that candidates can:</p> <ul style="list-style-type: none"> <li>• identify, access and apply test procedures</li> <li>• identify and use suitable reference standards</li> <li>• install and repair simple measures to meet statutory requirements</li> <li>• evaluate and adjust the impact of the operating environment on the performance of simple measures</li> <li>• analyse test results to determine the simple measure's suitability for verification (trade use)</li> <li>• maintain the security and confidentiality of data in accordance with organisational and regulatory requirements</li> <li>• report results in the required formats and expected timeframe.</li> </ul>
<b>Context of and specific resources for assessment</b>	<p>This unit of competency is to be assessed in the workplace or simulated workplace environment.</p> <p>This unit of competency may be assessed with:</p> <ul style="list-style-type: none"> <li>• MSATMREF301A Use and maintain reference standards.</li> </ul> <p>Resources may include:</p> <ul style="list-style-type: none"> <li>• simple measures, test equipment and reference standards</li> <li>• computer and relevant software and/or organisation information management system</li> <li>• Certificates of Approval for simple measures</li> <li>• relevant legislative and organisational procedures.</li> </ul>
<b>Method of assessment</b>	<p>The following assessment methods are suggested:</p> <ul style="list-style-type: none"> <li>• questions to assess understanding of relevant procedures and remedial actions</li> <li>• review of verification reports prepared by the candidate</li> </ul>



<b>EVIDENCE GUIDE</b>	
	<ul style="list-style-type: none"> <li>• feedback from supervisors and peers regarding the candidate's ability to verify the performance of simple measures in accordance with legislative and organisational procedures.</li> </ul> <p>In all cases, practical assessment should be supported by questions to assess underpinning knowledge and those aspects of competency which are difficult to assess directly. Questioning techniques should suit the language and literacy levels of the candidate.</p>
<b>This competency in practice</b>	<p>Industry representatives have provided the case studies below to illustrate the practical application of this unit of competency and to show its relevance in a workplace setting.</p> <p>Following an invitation from the trader, a verifier arrives at a millinery shop to verify a one metre rule set in the counter. After introducing him/herself, the verifier outlines the verification procedure and relevant certified reference standard. He/she visually inspects the rule to ensure that it complies with the relevant Certificate of Approval. He/she then conducts the required comparisons between the one metre rule and certified standard in accordance with the National Measurement Institute National Test Procedure. The verifier decides that the measure can be verified and marks the rule with the appropriate certification mark. He/she prepares the Certificate of Verification and presents it to the trader along with an invoice for the work undertaken. On the way out, the verifier notices another rule set into another counter. After examining it, he/she decides that the rule does not comply with the Certificate of Approval and advises the trader that it cannot be used for trade.</p>

## Range Statement

<b>RANGE STATEMENT</b>	
<p>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, if used in the performance criteria, is detailed below. 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) may also be included.</p>	
<p><b>Prescribed performance criteria for simple measures</b></p>	<p>Prescribed performance criteria for simple measures may include:</p> <ul style="list-style-type: none"> <li>• design is in accordance with the appropriate Certificates of Approval</li> <li>• performance meets the criteria described in the Certificates of Approval, National Test Procedure and legislation</li> </ul>
<p><b>Appropriate documentation</b></p>	<p>Where reference is made to documentation, it is expected the latest version will be used.</p> <p>Appropriate documentation may include:</p> <ul style="list-style-type: none"> <li>• reference standards</li> <li>• Certificates of Verification</li> <li>• Certificates of Approval for simple measures</li> <li>• test procedures for verifying simple measures</li> <li>• organisational test reports</li> <li>• organisational procedures e.g. company quality assurance manual</li> <li>• National Measurement Act</li> <li>• occupational health and safety (OHS) regulations, guidelines and procedures and material safety data sheets (MSDS)</li> <li>• equipment manuals and warranty, supplier catalogues and handbooks</li> <li>• National Measurement Institute policy</li> <li>• Australian Standards</li> </ul>
<p><b>Certificates of Approval</b></p>	<p>Certificates of Approval may include:</p> <ul style="list-style-type: none"> <li>• any Certificate issued by the Chief Metrologist under Regulation 60 of the National Measurement Regulations approving the pattern of a simple measure as being suitable for trade</li> </ul>
<p><b>Equipment</b></p>	<p>Equipment may include:</p>

<b>RANGE STATEMENT</b>	
	<ul style="list-style-type: none"> <li>• reference standards of measurement</li> <li>• equipment other than reference standards of measurement such as weighing instruments, strikes and funnels</li> </ul>
<b>Legislation</b>	<p>Legislation may include:</p> <ul style="list-style-type: none"> <li>• national measurement legislation</li> <li>• applicable Commonwealth, state and territory OHS legislation</li> </ul>
<b>National Test Procedures for simple measures</b>	<p>National Test Procedures for simple measures may include:</p> <ul style="list-style-type: none"> <li>• length measures</li> <li>• alcoholic beverage measures</li> <li>• lubricating oil measures</li> <li>• graduated measures</li> <li>• pharmaceutical measures</li> <li>• trade masses</li> <li>• any other test procedure prescribed by the National Measurement Institute</li> </ul>
<b>OHS and environmental management requirements</b>	<p>OHS and environmental management requirements refers to:</p> <ul style="list-style-type: none"> <li>• all operations must comply with enterprise OHS and environmental management requirements, which may be imposed through state/territory or Federal legislation. These requirements must not be compromised at any time</li> <li>• all operations assume the potentially hazardous nature of samples and require standard precautions to be applied</li> <li>• where relevant, users should access and apply current industry understanding of infection control issued by the National Health and Medical Research Council and State and Territory Departments of Health</li> </ul>
<b>Operating environmental impacts</b>	<p>Operating environmental impacts may include:</p> <ul style="list-style-type: none"> <li>• vibration</li> <li>• wind</li> <li>• heat</li> <li>• dust</li> <li>• electromagnetic interference</li> </ul>

<b>RANGE STATEMENT</b>	
	<ul style="list-style-type: none"> <li>• out of level</li> </ul>
<b>Records</b>	Records may include: <ul style="list-style-type: none"> <li>• test reports</li> <li>• safety procedures</li> <li>• a history of equipment calibration and test results</li> </ul>
<b>Simple measures</b>	Verifiers may be licensed to test and mark specific classes of simple measures from the following list. Simple measures may include: <ul style="list-style-type: none"> <li>• length measures</li> <li>• alcoholic beverage measures</li> <li>• lubricating oil measures</li> <li>• graduated measures</li> <li>• pharmaceutical measures</li> <li>• trade masses</li> <li>• any other instrument prescribed by the National Measurement Institute</li> </ul>

### Unit Sector(s)

<b>Unit sector</b>	Trade Measurement
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### Competency field

<b>Competency field</b>	
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### Co-requisite units

<b>Co-requisite units</b>		

