



Australian Government

Department of Education, Employment and Workplace Relations

MEM15022B Verify reference standards

Release: 2

MEM15022B Verify reference standards

Modification History

Single band identifier removed to clarify dual status

Unit Descriptor

Unit descriptor	The unit covers verifying reference standards used for legal purposes.
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Application of the Unit

Application of the unit	This unit applies to those performing verification of reference standards in a verifying authority organisation. It would mainly occur under laboratory conditions. Band: This unit has dual status and is to be regarded as both a Specialisation band A unit and Specialisation band B unit for progression to C5 (AQF level V). Unit Weight: 8
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Licensing/Regulatory Information

Not Applicable

Pre-Requisites

Prerequisite units		
Path 1	MEM09002B	Interpret technical drawing
	MEM12003B	Perform precision mechanical measurement
	MEM12023A	Perform engineering measurements

Prerequisite units		
	MEM18001C	Use hand tools

Employability Skills Information

Employability skills	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. Identify the categories and levels of verification for reference standards	1.1. The categories of reference standards that the organisation is authorised to verify are identified. 1.2. The classes of reference standards required to verify a range of standards are identified. 1.3. Tolerances for a range of reference standards are identified. 1.4. Tolerances for a range of reference standards are described.
2. Maintain suitable environmental conditions to facilitate verification of reference standards	2.1. Reference standard details are recorded in accordance with organisational guidelines. 2.2. Sources of possible operational procedures errors in the verification of reference standards are identified. 2.3. Required atmospheric conditions for the verification of a range of reference standards are applied. 2.4. Environmental conditions are assessed to determine whether a verification can be conducted.
3. Examine the design and required markings for a range of reference standards	3.1. The identification marking required for reference standards is located and explained. 3.2. Design features of a range of reference standards are correctly identified and applied. 3.3. The function of major components for a range of reference standards is described and applied. 3.4. The fundamental features of a range of reference standards are identified and explained.
4. Perform verification of reference standards	4.1. A variety of reference standards are verified. 4.2. Uncertainty and tolerances for reference standards are applied. 4.3. Results of verification are documented and certificate of verification is issued in accordance with organisational procedures, legislation and policies.

Required Skills and Knowledge

REQUIRED SKILLS AND KNOWLEDGE

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

REQUIRED SKILLS AND KNOWLEDGE**Required skills**

Look for evidence that confirms skills in:

- researching and identifying suitable reference standards for verification within standards hierarchy
- accessing reference manuals to gain appropriate information concerning tolerances for reference standards
- completing the organisation's information tracking documentation
- identifying operational errors relevant to the verification
- locating identification marks on reference standards
- researching design features on a range of reference standards
- completing verification work sheets
- completing and issuing certificates of verification

Required knowledge

Look for evidence that confirms knowledge of:

- relevant categories of reference standards for which the organisation is authorised to verify
- a range of classes for reference standards
- appropriate tolerance for a range of reference standards
- current status of clients' reference standards
- atmospheric factors required for verifying a range of reference standards
- remedial action for atmospheric deficiencies
- environmental factors that may adversely influence the integrity of the reference standards
- remedial action for a range of environmental deficiencies
- requirements for identification marking on reference standards
- the purpose of design specifications
- the purpose of the major components and functions of reference standards
- the fundamental features of reference standards
- the process for maintaining integrity of results including calculation
- the reference material for uncertainty and maximum permissible errors for a variety of reference standards.
- the process for producing certificates of verification in accordance with verifying authority status

Evidence Guide

EVIDENCE GUIDE

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.

Overview of assessment

A person who demonstrates competency in this unit must be able to verify reference standards. Competency in this unit cannot be claimed until all prerequisites have been satisfied.

Critical aspects for assessment and evidence required to demonstrate competency in this unit

Assessors must be satisfied that the candidate can competently and consistently perform all elements of the unit as specified by the criteria, including required knowledge, and be capable of applying the competency in new and different situations and contexts.

Context of and specific resources for assessment

This unit may be assessed on the job, off the job or a combination of both on and off the job. Where assessment occurs off the job, that is the candidate is not in productive work, then an appropriate simulation must be used where the range of conditions reflects realistic workplace situations. The competencies covered by this unit would be demonstrated by an individual working alone or as part of a team. The assessment environment should not disadvantage the candidate.

This unit could be assessed in conjunction with any other units addressing the safety, quality, communication, materials handling, recording and reporting associated with verifying reference standards, or other units requiring the exercise of the skills and knowledge covered by this unit.

Method of assessment

Assessors should gather a range of evidence that is valid, sufficient, current and authentic. Evidence can be gathered through a variety of ways including direct observation, supervisor's reports, project work, samples and questioning. Questioning techniques should not require language, literacy and numeracy skills beyond those required in this unit of competency. The candidate must have access to all tools, equipment, materials and documentation required. The candidate must be permitted to refer to any relevant workplace procedures, product and manufacturing specifications, codes, standards, manuals and reference materials.

EVIDENCE GUIDE

Guidance information for assessment	
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Range Statement**RANGE STATEMENT**

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.

Reference standards

Reference standards	Mass, volume, density, area, length, master meters, temperature
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Operating procedures

Operating procedures	Manufacturers' specifications, industry guidelines, Australian standards, legislation, organisational procedures and guidelines
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Legislation and policies

Legislation and policies	Enabling legislation, organisational procedures and guidelines Workplace health and safety legislation including storage and transportation of test equipment, handling of test equipment, handling of hazardous materials, safety clothing, manual handling techniques, site/premises conditions
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Documentation

Documentation	Fees, verification work sheets, certificate of verification
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Unit Sector(s)

Unit sector	
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Co-requisite units

Co-requisite units		

Competency field

Competency field	Quality
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