



Australian Government

Assessment Requirements for MSL973021 Conduct field-based acceptance tests for construction materials

Release: 1

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Modification History

Release	Comments
Release 1	This version was released in <i>MSL Laboratory Operations Training Package Release 2.0</i>. Supersedes and equivalent to MSL973009 Conduct field-based acceptance tests for construction materials. Range of conditions removed. Assessment requirements amended.

Performance Evidence

Evidence of competence in this unit must satisfy all of the requirements of the elements and performance criteria, and include demonstration of:

- conducted at least 3 different in situ tests to confirm the acceptability of raw or manufactured construction materials prior to or after their use
- safely and accurately collected and prepared 2 field samples test pieces within the required timeframe.

Knowledge Evidence

There must be evidence the candidate has knowledge of:

- the purpose and principles of construction materials tests performed as part of job role and key preparation/measurement steps in the test method
- the properties of construction materials under test
- calculation steps to give results in appropriate units and precision
- expected values for sample type and sources of uncertainty (and methods for control) in construction materials tests routinely used in job role
- typical site samples and test pieces
- types of field-based acceptance tests
- workplace procedures for:
 - waste minimisation and safe disposal procedures; and
 - sampling and testing procedures for specific sites, clients and samples
 - pre-use checks and operating test equipment
 - recording and reporting test results, calculations, site observations, and handling unexpected or atypical results and equipment problems
 - ensuring traceability of samples, test pieces, test data and results

- workplace confidentiality
- standard methods for testing construction materials: soils, aggregates, concrete and asphalt
- appropriate corrective actions for errors:
 - carefully re-reading of procedures and checklists
 - logically checking equipment set-up
 - checking calibration, zero error and drift for the measuring instrument
 - repeating test measurements
 - checking data entry and transcription for errors
 - seeking advice
- awareness of environmental sustainability issues as they relate to the work task
- legal, ethical and work health and safety (WHS) requirements specific to the work task.

Assessment Conditions

Skills must have been demonstrated in the workplace or in a simulated environment that reflects workplace conditions and contingencies. The following conditions must be met for this unit:

- use of suitable facilities, equipment and resources, including:
 - sampling and test equipment and materials specified in the test method
 - test methods and description of test set-up, data sets and records
 - calculator and/or computer and relevant software or laboratory information system.
 - test specifications.

Assessors must satisfy the NVR/AQTF mandatory competency requirements for assessors.

Links

MSL Laboratory Operations Companion Volume Implementation Guide is available from VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=5c63a03b-4a6b-4ae5-9560-1e3c5f462baa>