Title	Perform civil engineering laboratory asphalt tests		
Level	4	Credits	15

Purpose	This unit standard is one of a series relating to asphalt testing and technician level knowledge and skills.
	People credited with this unit standard are able to: perform civil engineering laboratory asphalt tests; and calculate and report results of civil engineering laboratory asphalt tests.

Classification	Infrastructure Civil Engineering > Infrastructure Laboratory
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Available grade	Achieved	
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## **Explanatory notes**

Applicable rules, standards, and codes include but are not limited to ISO/IEC 17025:2005 General requirements for the competence of testing and calibration laboratories available from <a href="http://www.iso.org/iso/store.htm">http://www.iso.org/iso/store.htm</a>.

## 2 Definitions

Organisational requirements refer to instructions to staff on policy and procedures which are formally documented or generally accepted at the worksite. This may include legislation; industry standards and methods; national and international standards and methods; customer/organisation developed methods; standard operating procedures; specifications; manuals; and manufacturer's information. Perform refers to completing the individual components of the test sequentially in terms of the relevant test method and organisational requirements. Components will vary between tests and include but are not limited to – the completion of tasks, from sample and equipment preparation to the calculation and reporting of results. Perform does not include the evaluation or the troubleshooting of tests.

Samples may include but are not limited to – prepared materials and test materials such as standards and reagents.

3 Evidence is required for civil engineering laboratory asphalt tests under the following three categories:

A minimum of four tests used in asphalt design including but not limited to -- specific gravity and density, maximum specific gravity, specimen compaction, tensile strength ratio, cantaboro, fatigue, wheel tracking, resilient modulus.

A minimum of two tests used in asphalt manufacture including but not limited to -binder content, grading, maximum specific gravity, air voids.

A minimum of two tests used in asphalt construction including but not limited to -pavement density (cores and nuclear density meter), NAASRA (ride), permeability,
texture.