

Australian Standard™

AS 2891.9.3—2005

Methods of sampling and testing asphalt

Method 9.3: Determination of bulk density of compacted asphalt—Mensuration method

1 SCOPE

This Standard sets out the method for determining the bulk density of compacted asphalt by mensuration. The method is particularly appropriate for use with open-graded mix or dense-graded mix with surface voids larger than 3 mm diameter. It is applicable where the asphalt samples are of cylindrical shape.

2 REFERENCED DOCUMENTS

AS

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| 1984 | Vernier callipers (metric series) |
| 2102 | Micrometer callipers for external measurement |
| 2891 | Methods of sampling and testing asphalt |
| 2891.1 | Method 1: Sampling of asphalt |
| 2891.2.2 | Method 2.2: Sample preparation—Compaction of asphalt test specimens using a gyratory compactor |
| 2891.5 | Method 5: Determination of stability and flow—Marshall procedure |

3 DEFINITIONS

For the purpose of this Standard, the definitions given in AS 2891.1 apply.

4 APPARATUS

The following apparatus is required:

- (a) *Calliper* An appropriate calliper meeting the requirements of AS 1984 or micrometer calliper meeting the requirements of AS 2102 readable to 0.1 mm.
- (b) *Balance* A top pan balance of sufficient capacity, with a limit of performance not exceeding ± 0.5 g.
- (c) *File* Fine cut.
- (d) *Stiff brush*.

5 TEST SAMPLE

The asphalt sample may be either compacted in the laboratory in accordance with AS 2891.2.2 or AS 2891.5, or cored from a pavement in accordance with AS 2891.1. Any loose particles or foreign matter shall be removed from the sample before testing.