

Australian/New Zealand Standard™

Methods of sampling and testing asphalt

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

AS/NZS 2891.9.3:2014

PREFACE

This Standard was prepared by the Joint Standards/Standards New Zealand Committee CE-006, Asphalt and Sprayed Surfacing, to supersede AS 2891.9.3—2005. It is based on VicRoads (Roads Corporation trading as ‘VicRoads’) method CRB 202.03, *Bulk Density of Compacted Asphalt Specimens by Mensuration* (August 1976).

The objective of this Standard is to set out the method to determine the bulk density by measurement of the dimensions of compacted asphalt specimens.

The objective of this revision is to reflect current practice in performing the measurements and to permit vacuum drying.

The term ‘normative’ has been used in this Standard to define the application of the appendix to which it applies. A ‘normative’ appendix is an integral part of a Standard.

METHOD

1 SCOPE

This Standard sets out the method for determining the bulk density by measurement of compacted asphalt specimens. The method is particularly appropriate for use with open-graded mix or dense-graded mix with surface voids larger than 3 mm diameter.

NOTE: Determining the density of relatively thin samples (e.g. where the asphalt thickness is less than 2.5 times the asphalt nominal size) may result in more variable or unreliable results due to the small size and the increased influence of surface voids. In particular, this is applicable to larger sized mixes with large surface voids such as nominal size 14 mm asphalt or greater and or stone mastic asphalt.

2 REFERENCED DOCUMENTS

The following documents are referred to in this Standard:

AS	
1984	Vernier callipers (metric series)
2102	Micrometer callipers for external measurement
2891	Methods of sampling and testing asphalt
2891.1.2	Method 1.2 Sampling—Coring method
2891.1.3	Method 1.3 Sampling—Asphalt from slabs