Australian/New Zealand Standard™

Methods of sampling and testing asphalt

Method 8: Voids and volumetric properties of compacted asphalt mixes

PREFACE

This Standard was prepared by the Joint Standards Australia/Standards New Zealand Committee CE-006, Asphalt and Sprayed Surfacing, to supersede AS 2891.8—2005, *Methods of sampling and testing asphalt*, Method 8: *Voids and density relationships for compacted asphalt mixes.*

The objective of this revision is to adopt the same terminology used in aggregate test methods and to amend the scope with respect to air void content in relation to field compaction testing.

METHOD

1 SCOPE

This Standard sets out the method for determining the following properties of compacted asphalt:

(a) Percentage air voids from separately determined values of bulk density and maximum density.

(b) Absorbed binder, effective binder, maximum theoretical density, voids in the mineral aggregate, and voids filled with binder where the proportions of component materials are known.

NOTE: The relationship between these properties is demonstrated in Appendix A.

Where the air void content of in-situ compacted asphalt is required, for compaction compliance testing, determine the air void content in accordance with AS/NZS 2891.14.5.

NOTE: The air void content can be determined using either this Standard or AS/NZS 2891.14.5. This Standard is intended for laboratory compacted asphalt and field samples of asphalt for investigation. AS/NZS 2891.14.5 is intended where percentage compaction and percentage in-situ air voids are determined for compaction compliance testing.

2 REFERENCED DOCUMENTS

The following documents are referred to in this Standard:

AS

1141	Methods for sampling and testing aggregates	
1141.5	Method 5:	Particle density and water absorption of fine aggregate
1141.6.1	Method 6.1:	Particle density and water absorption of coarse aggregate—Weighing-in-water method
1141.6.2	Method 6.2:	Particle density and water absorption of coarse aggregate—Pycnometer method