

Australian/New Zealand Standard™

Methods of testing protective helmets

Method 9: Determination of load distribution

PREFACE

This Standard was prepared by the Joint Standards Australia/Standards New Zealand Committee CS-097, Testing of Helmets and Visors, to supersede AS/NZS 2512.9:1996, *Methods of testing protective helmets, Method 9: Determination of load distribution*.

This Standard is republished without technical alteration

METHOD

1 SCOPE

This Standard sets out a method for determining the ability of a protective helmet to distribute the force of an impact.

2 REFERENCED DOCUMENTS

The following documents are referred to in this Standard:

AS/NZS

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| 2512 | Methods of testing protective helmets |
| 2512.1 | Method 1: Definitions and headforms |
| 2512.2 | Method 2: General requirements for the conditioning and preparation of test specimens and laboratory conditions |
| 2512.3.1 | Method 3.1: Determination of impact energy attenuation—Helmet drop test |

SAE

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| J211b | Instrumentation for impact tests, recommended practice |
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3 PRINCIPLE

An anvil is dropped towards the outer surface of a helmet positioned on a hemispherical headform. The force imparted to a force transducer mounted in the headform is measured.

4 APPARATUS

The following test apparatus (as shown in Figure 1) is required:

- (a) Headform and force transducer complying with the following requirements:
 - (i) Headform with a hemispherical upper surface of radius 70 ± 0.5 mm (60 ± 0.5 mm for helmets intended to fit on the size A headform as specified in AS/NZS 2512.1) and a ground finish of 25 μ m or better. The headform and support shall be made of steel and constructed as shown in Figures 2 and 3.