

Australian Standard™

AS 4878.5

Methods of test for coated fabrics**Method 5: Determination of bursting strength**

PREFACE

This Standard was prepared by the Joint Standards Australia/Standards New Zealand Committee TX-005, Coated Fabrics as an Australian Standard.

The Standard is identical with and has been reproduced from ISO 3303:1990, *Rubber- or plastics-coated fabrics—Determination of bursting strength*.

The objective of this Standard is to provide manufacturers and testing bodies with suitable methods for the determination of the bursting strength of rubber- or plastics-coated fabrics.

As this Standard is reproduced from an International Standard, the following applies:

- (a) In the source text, 'this International Standard' should read 'this Australian Standard'.
- (b) A full point should be substituted for a comma when referring to a decimal marker.

References to International Standards should be replaced by references to Australian Standards, as follows:

<i>Reference to International Standard</i>	<i>Australian Standard</i>
ISO	AS
2231 Rubber- or plastics-coated fabrics— Standard atmospheres for conditioning and testing	—



INTRODUCTION

The bursting strength of coated fabrics is often used as a measure of the multidirectional modulus of the material, as opposed to tensile properties which only provide guidance to the coated-fabric strength in one plane. In addition, bursting strength is more appropriate for testing materials prone to necking, such as coated fabrics with knitted substrates.

Method B, which employs an elastic diaphragm, is the more common type of instrument used in burst testing and is more suitable for the testing of the lighter and middle range of coated-fabric weights. Two aperture sizes are specified to allow the use of commercially available instruments, although results from the different machines may not be comparable.

Method A is included in order to extend the range of bursting strength to materials of higher modulus and to some extent simulate practical situations of mechanical damage.

1 Scope

This International Standard specifies two methods for the determination of the bursting strength of rubber- or plastics-coated fabrics, one using a tensile testing machine with a ring clamp and steel ball (method A) and the other using a diaphragm bursting tester operated by hydraulic pressure (method B). When specifying a coated fabric for which a bursting strength requirement applies, the customer and supplier should agree mutually upon the method of test to be employed.

2 Normative reference

The following standard contains provisions which, through reference in this text, constitute provisions of this International Standard. At the time of publication, the edition indicated was valid. All standards are subject to revision, and parties to

agreements based on this International Standard are encouraged to investigate the possibility of applying the most recent edition of the standard indicated below. Members of IEC and ISO maintain registers of currently valid International Standards.

ISO 2231 : 1989, *Rubber- or plastics-coated fabrics — Standard atmospheres for conditioning and testing.*

3 Apparatus

3.1 Method A (see figure 1)

3.1.1 Testing machine, power-driven and equipped with a suitable dynamometer. It shall be capable of maintaining a substantially constant rate of traverse of the moving head during the test and be fitted with an autographic recorder. An inertialess dynamometer (of electrical or optical type, for example) should preferably be used.

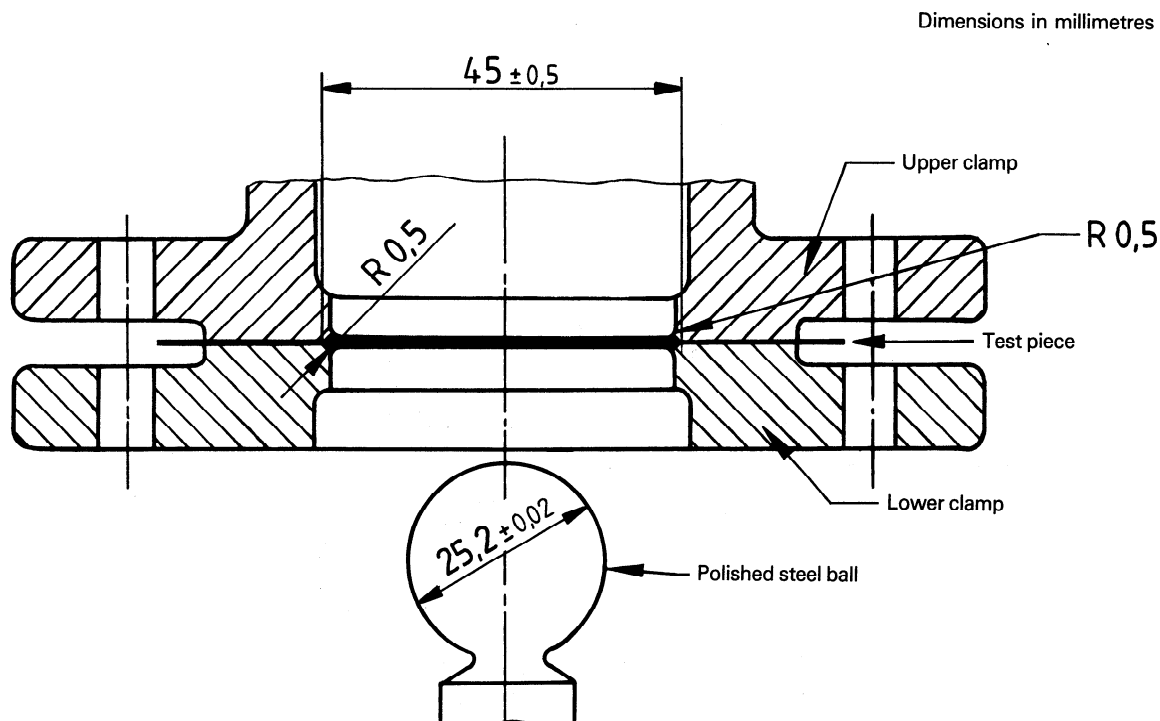


Figure 1 — Apparatus for method A