



Knitted and woven shade fabrics



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The following are represented on Committee TX-008:

- Australian Industry Group
 - Australian Radiation Protection and Nuclear Safety Agency
 - AWTA Product Testing
 - CSIRO
 - Department of Health and Human Services Victoria
 - Engineers Australia
 - Specialised Textiles Association
 - University of New South Wales
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This Standard was issued in draft form for comment as DR AS 4174:2017.

Standards Australia wishes to acknowledge the participation of the expert individuals that contributed to the development of this Standard through their representation on the Committee and through the public comment period.

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Australian Standard[®]

Knitted and woven shade fabrics

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PREFACE

This Standard was prepared by the Joint Standards Australia/Standards New Zealand Committee TX-008, Textiles for Horticulture and Agriculture, to supersede AS 4174—1994, *Synthetic shadecloth*.

This Standard incorporates Amendment No. 1 (August 2019). The changes required by the Amendment are indicated in the text by a marginal bar and amendment number against the clause, note, table, figure or part thereof affected.

After consultation with stakeholders in both countries, Standards Australia and Standards New Zealand decided to develop this Standard as an Australian Standard rather than an Australian/New Zealand Standard.

The objective of this Standard is to provide requirements for the classification, performance and labelling of knitted and woven shade fabrics for horticultural and human protection uses.

Requirements for horticultural and human protection uses, are set out in separate sections of the Standard.

The following two aspects of this Standard were originally developed from a document for the supply of synthetic shade fabric initiated by the Australian shade fabric industry in 1985:

- (a) Measurement of the cover factor of a shade fabric using a standard instrument.
- (b) Cover factor ranges for different categories of shade fabric.

The terms ‘normative’ and ‘informative’ have been used to define the application of the appendices to which they apply. A ‘normative’ appendix is an integral part of a Standard, whereas an ‘informative’ appendix is only for information and guidance.

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FOREWORD

When shade fabric is to be used for human protection purposes, such as shade structures, the calculated UVE results do not take into account important factors that may decrease the effective UVE, such as design features, height and size of the shade structure, the distance of the shade fabric from the subjects, the effect of direct and indirect solar UVR and the physical location of the subjects within the shade structure.

For this reason, the UVE value determined for the classification of the fabric does not indicate the actual reduction of solar radiation by a structure incorporating that fabric. A warning statement to this effect has been specified for inclusion on the labelling of fabric to be used for human protection purposes.

Evaluation by ultraviolet protection factor (UPF), in accordance with AS/NZS 4399, *Sun protection clothing—Evaluation and classification*, is not appropriate for evaluating shade fabrics for horticultural use or human protection.

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