

Tree stock for landscape use



AS 2303:2018

This Australian Standard® was prepared by EV-018, Arboriculture. It was approved on behalf of the Council of Standards Australia on 7 December 2018.

This Standard was published on 21 December 2018.

The following are represented on Committee EV-018:

Arboriculture Australia
Australian Institute of Horticulture
Australian Institute of Landscape Architects
Australian Local Government Association
Australian Pipelines and Gas Association
Institute of Australian Consulting Arboriculturists
Local Government Tree Resources Association
Nursery & Garden Industry Australia
Parks and Leisure Australia
TAFE NSW
The University of Melbourne
Western Sydney University

This Standard was issued in draft form for comment as DR AS 2303:2018.

Keeping Standards up-to-date

Ensure you have the latest versions of our publications and keep up-to-date about Amendments, Rulings, Withdrawals, and new projects by visiting: www.standards.org.au

www.saiglobal.com (sales and distribution)



Tree stock for landscape use

First published as AS 2303:2015. This edition 2018.

COPYRIGHT

© Standards Australia Limited 2018

All rights are reserved. No part of this work may be reproduced or copied in any form or by any means, electronic or mechanical, including photocopying, without the written permission of the publisher, unless otherwise permitted under the Copyright Act 1968 (Cth).

AS 2303:2018

Preface

This Standard was prepared by the Standard Australia Committee EV-018, Arboriculture to supersede AS 2303:2015 *Tree stock for landscape use*.

ii

The objective of this Standard is to provide criteria for those who grow, specify or purchase tree stock for landscape use. The use of such criteria enables quality tree stock to be identified, regardless of the production method used to grow them.

Referenced material and sourced information in this Standard has been collated from industry experts and based on the publication *Specifying Trees: A guide to assessment of tree quality* (2003), first published as *Purchasing landscape trees* (1996), reproduced with permission of Construction Information Systems Limited trading as NATSPEC and Ross Clark [1].

The terms "normative" and "informative" have been used in this Standard 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 for information and guidance only.

Contents

Preface		i
Foreword		iv
Section 1 1.1	Scope and general Scope	
1.2	Application	1
Section 2	Normative References	1
Section 3	Terms and definitions	1
Section 4	Criteria for tree stock assessment	6
4.1	General	6
4.2	Criteria for above-ground assessment of tree stock	6
	4.2.1 True to type	
	4.2.2 Height and calliper	
	4.2.3 Health	7
	4.2.4 Crown symmetry	7
	4.2.5 Significant injury	
	4.2.6 Stem taper	8
	4.2.7 Self-supporting	
	4.2.8 Stem and branch structure	
	4.2.9 Formative pruning	11
	4.2.10 Included bark	12
	4.2.11 Trunk position	13
	4.2.12 Compatibility of graft unions	
	4.2.13 Pests and diseases	13
4.3	Criteria for below-ground assessment of tree stock	
	4.3.1 Rootball diameter	
	4.3.2 Rootball depth	
	4.3.3 Height of root crown	
	4.3.4 Non-suckering rootstock	
	4.3.5 Pests, diseases and weeds	
	4.3.6 Rootball occupancy	
	4.3.7 Root direction	
	4.3.8 Root division	
Section 5	Tree stock balance assessment	15
5.1	General	15
5.2	Determining tree stock balance	16
Section 6	Testing	
6.1	Tree stock testing	
6.2	Retention of documentation	
_	\(\frac{1}{2}\) (normative) Sampling strategy and test procedure at dispatch	
	3 (normative) Assessment of rootball occupancy, root direction and root division	1
Appendix	at dispatch	19
Appendix (C (informative) Examples of dispatch tree stock inspection forms	21
	O (informative) Tree stock balance	
	hy	
P	J	

Foreword

This Australian Standard is aimed at simplifying the tree stock specification process and describes the above-ground and below-ground characteristics that are necessary in determining quality tree stock for landscape use.

The recognition and selection of quality tree stock is an important first step in a series of events, which, combined, enable trees to fulfil their long-term landscape potential. In addition to the recognition and selection of quality tree stock, good landscape planning and design, correct planting and establishment techniques and ongoing maintenance are also required for trees to be a successful component of the landscape. This Standard covers only the tree stock quality aspect of this entire process.

A number of factors are important in determining the quality of a tree. At the time of planting, a tree should be free of faults that would be likely to cause the tree to fail at some point in the future, or that would require a greater input of resources to establish. It should be healthy, structurally sound, have well-developed roots, have a uniform habit and good balance between the canopy and the rootball.

Growing quality tree stock in production nurseries takes great skill and care. The professional techniques applied to tree stock during their growth is very important, as is the nursery situation where the tree stock is grown.

Across Australia, many different production methods are utilized by production nurseries. While these techniques can vary greatly, the characteristics outlined in this Standard remain valid across all production methods.

It should be recognized that the term "tree" covers a range of highly variable living genera and species, which are influenced by their growing environment, including time of year and season. This Standard provides a method for determining tree stock quality that is flexible in application without compromising quality.

Australian Standard®

Tree stock for landscape use

Section 1 Scope and general

1.1 Scope

This Standard specifies the criteria for the assessment of above-ground and below-ground characteristics of tree stock that are to be supplied for landscape use. It covers container-grown, containerized, bare-rooted and ex-ground tree stock, and can be applied to all stages of growth.

The specifications and criteria in this Standard apply to all methods of production systems and styles of containers.

NOTE Tree stock are not manufactured articles that can be produced to an exact specification. Variability between tree stock is expected, as trees are living organisms and individual differences are to be expected.

This Standard does not apply to palms, or tree stock that is specifically produced for topiary, espalier, bonsai, pollarding or coppicing. This Standard does not apply to tree stock that has been transplanted from a landscape situation (not a production nursery) to places other than a production nursery.

1.2 Application

This Standard is intended for use by suppliers and purchasers of tree stock for landscape use and for those who specify tree stock for landscape use.

NOTE This Standard is also suitable for use under a third-party auditable nursery production best management practice or quality assurance (QA) accreditation program. Certification is not a requirement of the Standard, and the Standard may equally well be applied on a self-assessment basis within a user organization.

Section 2 Normative References

The following document is referred to in the text in such a way that some or all of its content constitutes requirements of this document.

AS 4373, Pruning of amenity trees

Section 3 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

3.1

apical bud

terminal bud located at the tip of the stem and branches

3.2

apical dominance

dominance of the terminal bud over lateral buds of growth

3.3

balance

concerning the relationship between the above-ground and below-ground parts of tree stock

3.4

bare-rooted

tree stock grown in the ground that is dispatched without soil