
**Bamboo structures — Grading of
bamboo culms — Basic principles and
procedures**

Structures en bambou — Classement des tiges de bambou

iTeh Standards
(<https://standards.itih.ai>)
Document Preview

ISO 19624:2018

<https://standards.itih.ai/catalog/standards/iso/4ff63cb2-9a11-4372-bbaf-c4fea8e20b40/iso-19624-2018>



iTeh Standards
(<https://standards.iteh.ai>)
Document Preview

ISO 19624:2018

<https://standards.iteh.ai/catalog/standards/iso/4ff63cb2-9a11-4372-bbaf-c4fea8e20b40/iso-19624-2018>



COPYRIGHT PROTECTED DOCUMENT

© ISO 2018

All rights reserved. Unless otherwise specified, or required in the context of its implementation, no part of this publication may be reproduced or utilized otherwise in any form or by any means, electronic or mechanical, including photocopying, or posting on the internet or an intranet, without prior written permission. Permission can be requested from either ISO at the address below or ISO's member body in the country of the requester.

ISO copyright office
CP 401 • Ch. de Blandonnet 8
CH-1214 Vernier, Geneva
Phone: +41 22 749 01 11
Fax: +41 22 749 09 47
Email: copyright@iso.org
Website: www.iso.org

Published in Switzerland

Contents

Page

Foreword	iv
Introduction	v
1 Scope	1
2 Normative references	1
3 Terms and definitions	1
4 Symbols	4
5 General	4
5.1 Grading	4
5.2 Grades	4
5.3 Graded bamboo culms	5
5.4 Grading operations	5
5.5 Secondary properties	5
6 Visual grading	5
6.1 General	5
6.2 Visual grading requirements	5
6.2.1 General	5
6.2.2 Condition properties	6
6.2.3 Geometric properties	7
6.3 Other requirements for visual grading	10
6.3.1 Moisture content	10
6.3.2 Age at harvesting	10
6.4 Check on visual grading process	11
7 Machine grading	11
7.1 General	11
7.2 Machine grading process requirements	11
7.3 Indicating properties	11
7.4 Grade-determining properties	12
7.5 Visual override	12
7.6 Hybrid grading methods	12
8 Structural properties of graded bamboo	12
8.1 General	12
8.2 Initial evaluation	12
8.2.1 Developing visual grading rules	13
8.2.2 Developing grading settings for machine grading	13
8.2.3 Sampling	13
8.2.4 Sample size for initial evaluation	14
8.2.5 Other considerations during initial evaluation testing	14
8.3 Periodic evaluation	14
8.4 Reduced test programmes and secondary properties	15
9 Product identification	15
10 Documentation	15
Annex A (informative) Example of application of clauses in this document to a visual grading standard for bamboo culms based on external diameter and flexural properties	16
Bibliography	22

Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular, the different approval criteria needed for the different types of ISO documents should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see www.iso.org/directives).

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights. Details of any patent rights identified during the development of the document will be in the Introduction and/or on the ISO list of patent declarations received (see www.iso.org/patents).

Any trade name used in this document is information given for the convenience of users and does not constitute an endorsement.

For an explanation of the voluntary nature of standards, the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT) see www.iso.org/iso/foreword.html.

This document was prepared by ISO Technical Committee 165, *Timber structures*.

Any feedback or questions on this document should be directed to the user's national standards body. A complete listing of these bodies can be found at www.iso.org/members.html.

ISO 19624:2018

<https://standards.iteh.ai/catalog/standards/iso/4ff63cb2-9a11-4372-bbaf-c4fea8e20b40/iso-19624-2018>

Introduction

The general principle of this document is that any type of grading procedure is acceptable, provided it is defined, controlled, and documented to the extent required to achieve the degree of reliability intended for the structural application of the product. This document specifies procedures that conform to this principle. The grading procedures outlined in this document require visual, dimensional and mechanical stages to ensure conformity.

[Annex A](#) provides an example conformance standard reflecting the requirements of this document.

iTeh Standards
(<https://standards.itih.ai>)
Document Preview

ISO 19624:2018

<https://standards.itih.ai/catalog/standards/iso/4ff63cb2-9a11-4372-bbaf-c4fea8e20b40/iso-19624-2018>