

DRAFT TANZANIA STANDARD

Wood — Sampling methods and general requirements for physical and mechanical testing of small clear wood specimens

TANZANIA BUREAU OF STANDARDS

This draft Tanzania Standard was published under the authority of the Board of Directors of Tanzania Bureau of Standards on yyy-mm-dd.

Tanzania Bureau of Standards (TBS) is the statutory national standards body for Tanzania established under the Standards Act No. 3 of 1975, repealed and replaced by the Standards Act No. 2 of 2009.

The Building and Construction Divisional Standards Committee (BCDC), under whose supervision this Tanzania Standard was prepared, consists of representatives from the following organizations:

*College of Engineering and Technology (CoET), University of Dar es Salaam (UDSM) Ministry of Works and Transport (MoWT) National Housing Corporation (NHC) Contractors Registration Board (CRB) Ardhi University (ARU) Jeshi la Kujenga Taifa (JKT) *National Estates and Designing Consultancy Company Ltd (NEDCO) Architects and Quantity Surveyors Registration Board (AQRB) Institution of Engineers Tanzania (IET) *National Construction Council (NCC) Engineers Registration Board (ERB)

The organizations marked with an asterisk (*) in the above list, together with the following were directly represented on the Technical Committee entrusted with the preparation of this Tanzania Standard:

Tanzania Forestry Research Institute (TAFORI) Sokoine University of Agriculture (SUA) Sao Hill Industries Ltd Tanzania Forest Services Agency (TFS) Zanzibar Bureau of Standards (ZBS)

Tanzania Bureau of Standards P O Box 9524 Dar es Salaam Tel: +255 (22) 2450206/2450949/2450298 Fax: +255 22 2450298 E-mail: info@tbs.go.tz Website: www.tbs.go.tz

0 National Foreword

The Tanzania Bureau of Standards is the statutory national standards body for Tanzania, established under standards Act No. 3 of 1975, amended by Act No. 2 of 2009.

This draft Tanzania Standard is being prepared by BCDC 6 Sawn timber, Sawn logs and Wood based Components technical committee under the supervision of the Building and Construction Divisional Committee (BCDC).

This draft Tanzania Standard is the identical adoption of *ISO 3129:2019 Wood* — *Sampling methods and general requirements for physical and mechanical testing of small clear wood specimens* published by International Organization for Standardization.

This draft Tanzania Standard replaces TZS 258: 2018 Wood — Sampling methods and general requirements for physical and mechanical testing of small clear wood specimens which has been revised.

Terminologies and conventions

The text of the International Standard is hereby recommended for approval without modification.

Some terminologies and certain conventions are not identical with those used as Tanzania Standard; attention is drawn to the following:

The comma (,) has been used as decimal marker (.) for metric dimensions. In Tanzania Standards, its current practice to use a full point on the baseline as decimal marker.

Whenever the words "International Standard" appear, referring to this standard, they should be interpreted as "Tanzania Standard".

INTERNATIONAL STANDARD

Third edition 2019-11

Wood — Sampling methods and general requirements for physical and mechanical testing of small clear wood specimens

Bois — Méthodes d'échantillonnage et conditions générales pour les essais physiques et mécaniques de petites éprouvettes de bois net

Licensed to TBS AZE ATEN Order # NUMBER Durston Single-user licence dury or



Reference number ISO 3129:2019(E)



COPYRIGHT PROTECTED DOCUMENT

© ISO 2019

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

Licensed to TBS Aziz Abdallah Order # NUMBER/Downloaded: 2025-02-03 Single-user licence only, copying and networking prohibited.

Contents

Page

1	scope
2	Normative references
3	Terms and definitions
4	General principles
5	Sampling 5.1 Selection of material 5.2 Sampling of wood material 5.2.1 General 5.2.2 Logs 5.2.3 Matching for test of dry material
_	5.2.4 Sawn timber
6	 Conditioning of material 6.1 Test pieces with a standardized moisture content (air-dry) 6.2 Test pieces with moisture content of equal to or above fibre saturation point (green)
7	Preparation of test pieces 7.1 Form and dimensions 7.2 Direction of grain 7.3 Permissible deviations 7.4 Marking 7.5 Sample size (number of test pieces) 7.5.1 Random sampling 7.5.2 Selective sampling 7.5.3 Mechanical sampling 7.5.4 Minimum number of test pieces 7.6 Conditioning of test pieces 7.6.1 Testing at equilibrium moisture content (air-dry condition) 7.6.2 Testing pieces at or above fibre saturation point (green condition) 7.6.3 Storage
8	General requirements for physical and mechanical tests8.1Temperature and humidity conditions in the laboratory8.2Procedure
9	Calculation and expression of results
10	Test report
Bibli	ography

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 Technical Committee ISO/TC 218, Timber.

This third edition cancels and replaces the second edition (ISO 3129:2012), which has been technically revised.

The main changes compared to the previous edition are as follows:

— <u>Clause 2</u> and Bibliography were updated.

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 <u>www.iso.org/members.html</u>.

Wood — Sampling methods and general requirements for physical and mechanical testing of small clear wood specimens

1 Scope

This document specifies methods for the extensive and limited sampling of wood, conditioning and preparation of test pieces. It also specifies the general requirements for physical and mechanical testing of small clear wood specimens. The sampling guidance provided in this document can be applied for timber taken from either trees, logs, or pieces of ungraded/graded/presorted sawn timber for non-structural applications, such as furniture, windows, doors, etc., only.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO 24294, Timber — Round and sawn timber — Vocabulary

3 Terms and definitions

For the purposes of this document, the terms and definitions given in ISO 24294 apply.

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

- ISO Online browsing platform: available at <u>https://www.iso.org/obp</u>
- IEC Electropedia: available at http://www.electropedia.org/

4 General principles

This document covers procedures of sampling for obtaining small clear specimens which, when tested in accordance with methods specified under relevant International Standards, may provide information on the influence on mechanical properties of such factors as moisture content, density, position in cross-section, height in the tree and locality of growth.

5 Sampling

5.1 Selection of material

The material intended for physical and mechanical tests shall be selected taking into account the purpose of the test, as well as the requirements to ensure that the properties obtained from the test pieces represent the sample population.

5.2 Sampling of wood material

5.2.1 General

The material selected shall be in the form of either logs or sawn timbers.

Licensed to TBS Aziz Abdallah Order # NUMBER/Downloaded: 2025-02-03 Single-user licence only, copying and networking prohibited.

©TBS 2025 – All rights reserved