



## **DRAFT TANZANIA STANDARD**

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**Hinged or pivoted doors — Determination of the resistance to static torsion**

**TANZANIA BUREAU OF STANDARDS**

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This draft Tanzania Standard was published under the authority of the Board of Directors of Tanzania Bureau of Standards on yy-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(TBS) is the statutory national standards body for Tanzania established under the Standards Act No. 3 of 1975, repealed and replaced by the Standards Act No. 2 of 2009.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:

- \* University of Dar es Salaam, College of Engineering and Technology,  
Tanzania Commission for Science and Technology (COSTECH)  
Ministry of Works  
National Housing Corporation (NHC)  
Contractors Registration Board (CRB)
- \* Ardhi University (ARU)  
National Defense Force, National Service Division (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 draft Tanzania Standard:

Ministry of Finance and Planning  
Zanzibar Bureau of Standards (ZBS)  
National Development Corporation (NDC)  
Tanzania Building Agency (TBA)  
Tanganyika Wattle Co. Ltd (TANWAT)  
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## **0 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 15 Doors and Windows technical committee under the supervision of the Building and Construction Divisional Committee (BCDC).

This draft Tanzania Standard is an identical adoption of the 2<sup>nd</sup> Edition of International Standard ISO 9381:2005 *Hinged or pivoted doors — Determination of the resistance to static torsion* published by International Organization for Standardization.

This draft Tanzania Standard replaces TZS 2394: 2019 *Hinged or pivoted doors — Determination of the resistance to static torsion* 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”.

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## Hinged or pivoted doors — Determination of the resistance to static torsion

*Portes battantes ou pivotantes — Détermination de la résistance à la torsion statique*



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## 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.

International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 2.

The main task of technical committees is to prepare International Standards. Draft International Standards adopted by the technical committees are circulated to the member bodies for voting. Publication as an International Standard requires approval by at least 75 % of the member bodies casting a vote.

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.

ISO 9381 was prepared by Technical Committee CEN/TC 33, *Doors, windows, shutters, building hardware and curtain walling* (as EN 948:1999) and was adopted, under a special “fast-track procedure”, by Technical Committee ISO/TC 162, *Doors and windows* in parallel with its approval by the ISO member bodies.

This second edition cancels and replaces the first edition (ISO 9381:1989) which has been technically revised.

Throughout the text of this document, read “...this European Standard...” to mean “...this International Standard...”.

## Foreword

This European Standard has been prepared by Technical Committee CEN/TC 33 "Doors, windows, shutters and building hardware", the secretariat of which is held by AFNOR.

This European Standard replaces EN 129:1984.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by February 2000, and conflicting national standards shall be withdrawn at the latest by February 2000.

According to the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Czech Republic, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and the United Kingdom.

This standard is one of a series of standards for doors.

This standard has been prepared taking into account ISO 9381 and EN 129 and supersedes EN 129.

## Introduction

For manufacturers of door leaves whose products are not sold as part of a doorset, provision is made for claiming compliance with the relevant requirements by the testing of such door leaves in a typical frame. Nevertheless, the fact that a particular door leaf meets with the relevant requirements in this way does not necessarily mean that a door assembly incorporating that door leaf will meet the requirements.

## 1 Scope

This European standard applies to all vertically hinged or pivoted doors.

The standard specifies the method to be used to determine the permanent deformation caused when static stress in torsion is applied to an open door leaf fixed in its own door frame as part of a doorset.

NOTE : Such torsional stresses that might reasonably be expected, such as in attempts to free a door which sticks, should neither damage nor impair the performance of a door.

The method may also be used in respect a door leaf submitted for test in a frame which the manufacturer considers appropriate to and typical for the intended utilisation.

## 2 Apparatus

### 2.1 Test surround

The surround in which the test specimen is tested, which shall be sufficiently rigid to withstand the test load without deflecting to an extent likely to influence the test result.

### 2.2 Loading equipment

A suitable device with weights or a controlled and calibrated ram, accurate to 2 %.

### 2.3 Measuring equipment

A dial or digital gauge accurate to 0,01 mm.

## 3 Test specimens

Test specimens shall be stored and tested in a non-destructive environment within the ranges of 15 °C to 30 °C and 25 % to 75 % relative humidity.

Doors which are designed to be glazed, shall be supplied for testing with all glazing carried out in accordance with the door manufacturer's specification.

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