

**RWANDA
STANDARD**

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425**

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**Furniture — Storage units — Functional
sizes, stability, strength and durability for
storage units**



Reference number

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Contents

Page

Foreword	iv
1 Scope	1
2 Normative references	1
3 Terms and definitions	1
4 Types of storage units	2
5 Dimensions of office storage units	3
5.1 Kitchen worktop	3
5.2 Drawers	3
6 Requirements for ironmongery.....	3
7 Requirements for stability, strength and durability of storage units.....	3
7.1 Stability test	3
7.2 Strength and durability test.....	3
8 Marking.....	4
8.1 Adhesive label	4
8.2 Data sheet	4
8.3 Care and maintenance	4
9 Inspection methods.....	5

Foreword

Rwanda Standards are prepared by Technical Committees and approved by Rwanda Standards Board (RSB) Board of Directors in accordance with the procedures of RSB, in compliance with Annex 3 of the WTO/TBT agreement on the preparation, adoption and application of standards.

The main task of technical committees is to prepare national standards. Final Draft Rwanda Standards adopted by Technical committees are ratified by members of RSB Board of Directors for publication and gazettment as Rwanda Standards.

DRS 425 was prepared by Technical Committee RSB/TC 54, Timber, Furniture and engineered wood.

Committee membership

The following organizations were represented on the Technical Committee on Timber, Furniture and engineered wood (RSB/TC 54) in the preparation of this standard.

Action pour le Developpement de l'Artisanat au Rwanda (ADARWA)

Association pour la défense des droits des consommateurs au Rwanda (ADECOR)

Association pour la Promotion des Artisans du Bois (APROAB)

GiZ Eco—Emploi

Integrated Polytechnic Regional Centre (IPRC) — Kitabi

Kalka and Partners Ltd

MANUMETAL

MASS DESIGN

Ministry of Trade and Industry (MINICOM)

National Industrial Research and development Agency (NIRDA)

New Forest Company (NFC)

REAL Contractors

Rwanda Education Board (REB)

Rwanda Environment Management Authority (REMA)

Rwanda Public Procurement Authority (RPPA)

Rwanda Water and Forestry Authority (RWFA)

Rwanda Wood Association

STRAW Tech

University of Rwanda — College of Agriculture, Animal Science and Veterinary Medicine (UR — CAVM)

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Rwanda Standards Board (RSB) — Secretariat

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Introduction

Despite the Rwandan growth trend, the wood sector has not been implemented as required to produce high quality wood products and vigorous competitive market. The quality of wooden furniture is highly affected by the quality of timber, standardized production chain, quality control mechanism and grading rules. The lack of aforesaid factors results into market dominated by poor quality wooden furniture, compromised safety and unfair competition at the market.

The emerging market dynamics show that consumer's preferences have gradually shifted from furniture made by local timbers to the imported ones, which is considered as a limiting factor to the development and growth of the wood economy in Rwanda.

To ensure a positive trade balance in wood market there is a dire need to improve and ensure quality of domestic wood products.

This Standard is one of the series standards on furniture in Rwanda. The series currently consists of the following:

DRS 413:2019 Furniture — Quality and grading of wooden furniture (Under development)

DRS 424:2019 Furniture — Specifications for bedsteads (Under development)

DRS 425:2019 Furniture — Storage units — Functional sizes, stability, strength and durability for storage units (Under development)

DRS 426:2019 Furniture — Chairs and tables for educational institutions — Functional sizes, strength, durability and stability for seating and tables (Under development)

Furniture — Chairs and tables for home furniture — Functional sizes, strength, durability and stability for seating and tables (Under development)

Furniture — Tables — Test methods for the determination of stability, strength and durability (Under development)

ISO 7170:2005 Furniture — Storage units — Determination of strength and durability

ISO 7171:2019 Furniture — Storage units — Test methods for the determination of stability

ISO 7173:1989 Furniture — Chairs and stools — Determination of strength and durability

Furniture — Storage units — Functional sizes, stability, strength and durability for storage units

1 Scope

This Draft Rwanda Standard specifies the basic functional sizes for office storage units. This standard includes requirements for stability, strength and durability. Requirements for materials, design, construction or quality are not covered by this standard.

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 7170, *Furniture — Storage units — Test methods for the determination of strength and durability*

ISO 7171, *Furniture — Storage units — Test methods for the determination of stability*

3 Terms and definitions

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

3.1

Storage unit

Piece of furniture for storing something

Example A shelf, a cupboard

3.2

Cupboard

piece of furniture with a door and typically shelves used for storage

3.3

Drawer

Box-shaped storage compartment with two sides, front and back, bottom members without a lid, made to slide horizontally in and out of a desk, chest, or other piece of furniture.

3.4

Shelf

Flat long board or rigid material, fixed horizontally in a frame or in cupboard that provides a surface for the storage or display of objects

3.5

Pedestal

Piece of furniture with a chest of drawers or rectangular cabinet containing drawers

NOTE A pedestal can be called side bed desk.

3.6

Ironmongery

Any metal fixing or fitting used on furniture that penetrate the material, provide security, provide movement and used for safety.

NOTE Fixings that penetrate the material, include screws, bolts and nails. Those that provide security include locks and latches; those for movement are hinges whereas those for safety include handles, fasteners, ball catches and overhead door closers.

4 Types of storage units

The types of office storage units covered by this standard include:

- a) Shelves;
- b) Cupboards;
- c) Drawers;

d) Pedestals.

5 Dimensions of office storage units

5.1 Kitchen worktop

The height of a kitchen worktop shall be in the range of 870 mm to 1000 mm.

5.2 Drawers

Table 1 presents the minimum dimensions of drawers.

Table 1: Minimum dimensions of drawers and shelves

Type of storage	Minimum internal dimensions of usable space mm		
	Length	Width	Height
Horizontal storage	420	330	120
Suspended filing	420	330	270

6 Requirements for ironmongery

When a storage unit is standing on a level concrete floor, catching and locking devices, including latch rods for stationery cupboards, shall operate smoothly. No part of the storage unit should deform when operating the ironmongery.

7 Requirements for stability, strength and durability of storage units

7.1 Stability test

Stability test for storage units shall be conducted in accordance with ISO 7171.

7.2 Strength and durability test

Strength and durability test for storage unit shall be conducted in accordance with ISO 7170.

8 Marking

8.1 Adhesive label

Each storage unit shall bear the following information on indelible and legible adhesive label stuck to the back of the storage unit or to the inside surface of the left side face.

- a) Manufacturer's name, trade name or trademark;
- b) Model identification number; and
- c) Batch identification number.
- d) Maximum load carrying capacity per shelf/drawer

8.2 Data sheet

Each storage unit shall have an accompanying data sheet. The information on the sheet shall be printed in the largest typeface practicable and expressed as simply as possible. The following information shall be provided:

- a) The manufacturer's name, trade name or trademark;
- b) The model identification and the batch identification;
- c) A list of the materials used in the manufacture of the storage unit;
- d) If the storage unit is to be assembled or installed by the purchaser, full instructions, including diagrams, indicating exactly how the storage unit is to be assembled or installed;
- e) If the storage unit has adjustable shelves, instructions on how to adjust them shall be provided.

8.3 Care and maintenance

Information concerning care and maintenance of the storage unit shall be provided by the manufacturer and delivered together with the datasheet. The following information shall be given:

- a) If the use of certain cleaning materials could cause permanent damage to the storage unit, a warning to this effect, and the action to be taken to avoid this possibility;
- b) The recommended method of cleaning exposed surfaces;
- c) The correct methods to be used for major cleaning operations; and
- d) Any recommended maintenance procedures

9 Inspection methods

Each storage unit shall be visually examined for compliance with the requirements of this standard for which tests to assess compliance are given in Clause 7.

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Bibliography

- [1] RS ISO 21887, Durability of wood and wood-based products — Use classes
- [2] United Nations Educational, Scientific and Cultural Organization — *School furniture handbook*, 1979

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