CDC 10 (3112) DTZS
ICS 85.080.10

DRAFT TANZANIA STANDARD

Envelope — Specification

TANZANIA BUREAU OF STANDARDS

Third Edition 2022

Foreword

This Draft Tanzania Standard is being developed by the Stationery and paper Technical Committee under the supervision of the Chemical Division Standards Committee and it is in accordance with the procedures of the Bureau.

This Tanzania Standard has been prepared with assistance drawn from:

IS 13892:2016 Correspondence envelopes – Specification
DUS 2242: 2020 Envelope — Specification

In reporting the result of a test or analysis made in accordance with this Tanzania Standard, if the final value, calculated or observed is to be rounded off, it shall be done in accordance with TZS 4 (see clause 2).

Envelope — Specification

1 Scope

This Draft Tanzania Standard specifies requirements, sampling and tests method for envelopes made of paper.

lt does not cover the ways of closing them.

2 Normative references

The following referenced documents are indispensable for the application of this document. The latest edition of the referenced document (including any amendments) applies;

TZS 79, Paper — Determination of bursting strength

ISO 536, Paper and board — Determination of grammage

TZS 747/ISO 1974 Paper and board — Determination of tearing resistance (Elmendorf method)

TZS 1297/ISO 2758 Paper – Determination of bursting strength

3 Terms and definitions

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

3.1
flap
fold-in of an envelope so as to close it

3.2
seam
central point running parallel to the height of the open end envelope. It may be in the centre or the side

3.3
window
opening in the envelope with or without a translucent patch designed to allow the contents inside the envelope to show through or;
a rectangular cut-out made in the face of an envelope and filled with a transparent material through which an address or other information shall be read.

3.4
Banker Envelope
With opening on the longer side of the envelope.

3.5
Bottom Flap
The flap on the bottom of the pocket type envelope gummed to the body to seal the bottom, saving the contents from falling out.

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3.6
Pocket Envelope
With opening on the shorter side of the envelope.

3.7
Sealing Flap
The flap on the top edge of the envelope which will act as a closure. This flap may or may not be gummed.

4 Types

The envelopes shall be of the following two types depending on their shape, namely:
a) Type 1 — Pocket envelope, and
b) Type 2 — Banker envelope

5 Requirements

5.1 General requirements

5.1.1 The envelope shall be a flat case, generally rectangular, except square envelopes, and made from one sheet of paper.

5.1.2 The paper shall be so folded as to provide a plain front and back consisting of four overlapping flaps. Three flaps shall be stuck together and completely sealed while the fourth, which may or may not be gummed, serves as a closure (or sealing flap). The left and right side flaps shall be sealed under the bottom flap.

5.1.3 In case the fourth flap is gummed, the adhesive used for this purpose shall be re-moistenable, nonhygroscopic, non-toxic and of vegetable or synthetic type. Animal glue shall not be used for this purpose.

5.1.4 The adhesives used for making the envelopes shall be of good quality and may not deteriorate with age or under particular environmental condition.

5.1.5 The front or working side may have a window fitted with transparent material

5.1.6 The overlay between envelope and envelope window shall be glued carefully and completely to the inner side of the envelope and shall be located outside the reserved area for bar coding.

5.1.7 The lowest part of the address side of the envelope, 20 mm wide, covering the whole length of the envelope shall be reserved for bar coding.

5.1.8 The inner portion of the envelope may be tinted, if desired by the purchaser; design and shade of tint shall be as agreed to between the purchaser and the supplier.

5.2 Construction

Envelopes shall be manufactured from either open side or open end construction designs. Both these designs may be with or without windows.

NOTE — Envelopes can be manufactured in an almost endless number of sizes and shapes. Dozens of different designs can be developed from these two basic styles to meet the customer's particular requirements.

5.2.1 Open end envelopes

Open End envelopes have their opening and the seal flap located on the short dimension. They are well suited to hand insertion applications. Open End envelopes are also known as “Pocket envelopes” and larger Open End envelopes are also called “Catalogs”. (See Annex A)

5.2.2 Open side envelopes

Open Side envelopes are ideal for automatic insertion applications and are suited for hand insertion applications as well. Open Side envelopes are also known as “Banker envelopes” and larger Open Side envelopes are also called “Booklets”. (See Annex A)

5.3 Designation

Envelopes shall be designated by a reference to the construction design followed by an indication of size. The size shall be expressed by its two dimensions in millimetres, the smaller dimension being given first:

EXAMPLE Open End envelope, 229 × 324

5.4 Size

5.4.1 Dimensions of Envelopes

The nominal dimensions of envelopes shall be as given in Table 1. The size of the envelopes shall be expressed by its two dimensions in millimetres, the smaller dimension being given first.

5.4.2 Dimensions of Windows

For an envelope with a window, the nominal dimensions of the window shall be 39 mm × 93 mm, the distance of the left edge of the window from the left edge of envelope shall be 20 mm and the distance of the lower edge of the window from the bottom of the envelope shall be 20 mm

5.4.3 Tolerances

The tolerance on all nominal dimensions given in Table 1 shall be ±5 mm.

Table 1 — Envelope dimensions

Envelope Style	Size (mm)										
Commercial	89 × 152	92 × 165	92 × 219	95 × 171	98 × 190	98 × 225	105 × 241	110 × 220	110 × 230	114 × 241	176 × 254
	178 × 254	229 × 324	254 × 381	305 × 405							
Baronial	92 × 130	111 × 146	133 × 184	212 × 165							
A style	98 × 225	111 × 146	121 × 165	133 × 184	152 × 241	206 × 410					
Square	127 × 127	140 × 140	152 × 152	165 × 165	178 × 178	190 × 190	203 × 203	216 × 216	229 × 229	214 × 241	343 × 343
Booklet	121 × 165	140 × 191	140 × 206	146 × 225	152 × 229	152 × 241	165 × 241	178 × 254	191 × 267	222 × 292	229 × 305
Catalog	98 × 191	102 × 162	117 × 171	127 × 191	140 × 191	140 × 210	105 × 241	114 × 264	121 × 279	127 × 292	152 × 229
	165 × 241	178 × 254	191 × 267	210 × 286	216 × 267	222 × 286	229 × 305	241 × 318	254 × 305	254 × 330	292 × 368
Wallet Flap	105 × 241	114 × 264	121 × 279	127 × 292	152 × 305						
Mail	105 × 241	229 × 305	241 ×318	254 × 330							

5.5 Printing
The envelopes, if required, may be suitably and distinctly printed as agreed upon between the purchaser and the supplier. This printing shall be on the smooth surface of the paper and at least 2.0 cm away from any of the edges.

5.6 Materials

5.6.1 Paper
5.6.1.1 The grammage of the paper used shall be dependent on the area of the envelope and it shall be as per Table 2 when tested in accordance withISO 536. A tolerance of ± 5 percent shall be permitted on the nominal grammage for individual test results and the mean of 10 test results shall not vary from nominal grammage by more than ± 2.5 percent.

5.6.1.2 The surface of the paper shall be of uniform structure, free from dust/ dirt, blemishes, creases, specks and holes. Mineral filling shall not cause corrosive or abrasive damage to transport means.

5.6.1.3 The paper shall be dimensionally stable and flat when kept in ambient conditions of 20-80 percent relative humidity and 15 to 35°C temperature.

5.6.1.4 The paper shall also comply with the requirements given in Table 2

5.6.2 Window Material

5.6.2.1 At a minimum, windows shall be placed 12.7 mm from the side and the bottom of the face of the envelope to ensure adequate room for patch adhesive.

5.6.2.2 Transparency shall be adequate to ensure proper legibility to text under the window with normal sight.

5.6.2.3 Glassine paper with a minimum grammage of 35 g/m^2, cellophane paper of minimum grammage 40 g/m^2 or PVC/BOPP of a minimum thickness of 15 microns shall be used as window material. The material shall stick firmly without any wrinkles to the inner side of plain front of the envelope

Table 2 — Requirements of Paper for making envelopes

Parameter	**Area of envelope** (× 10^3 mm^2)	**Requirement**	**Test Method**
Grammage (g/m^2), min,	Up to 30	70	ISO 536
	31 to 120	80	
	121 and above	90	
Burst Index, Nm2/g (min)	n/a	2.0	TZS 1297/ISO 2758
Tear index (Machine Direction) mNm2g, min.	n/a	12.0	TZS 747/ISO 1974

5.6.3 Joints (seams)

5.6.3.1 The pasting of the joints, wherever required, shall be even and continuous without leaving any gap or opening.

5.6.3.2 The gum applied on the sealing flap, seam and bottom flap shall not extend beyond the overlapping portion. The left and right side flaps shall be sealed under the bottom flap.

5.6.3.3 The width of the bottom flap and the seam shall be between 1.5 cm and 2.5 cm to ensure the strength of the envelope and the safety of its contents.

5.6.4 Flaps
5.6.4.1 The flaps for closing the envelopes shall be of suitable shape, as agreed to between the purchaser and the supplier.

5.6.4.2 Their width shall be such that it closes the envelope securely and ensures the safety of its content.
NOTE— The adhesive applied on the sealing flap should not go beyond the overlapping area so that it should not stick to the letter in the envelope

6 Packaging and Labelling

6.1 Packaging
Envelopes shall be packaged in suitable packaging materials which shall protect the product from damage during transportation, handling and storage.

6.2 Labelling
Each secondary package shall be legibly and indelibly labelled either in English, Kiswahili or French or a combinationwith the following information:

a) name and address of manufacturer;

b) size and colour of the envelope;

c) batch/lot number;

d) number of envelopes in the package;

e) whether gummed or ungummed; and

f) country of origin

7 Sampling and criteria for conformity

7.1 Lot

All the packages of envelopes of identical size and belonging to the same batch of manufacture shall be grouped together to constitute a lot. Each lot shall be tested separately for various requirements of this specification.

7.2 General Requirements for Sampling

7.2.1 Samples shall be protected from exposure to heat, direct sunlight, liquids, varying humidity conditions as well as any other harmful influences.

7.2.2 Samples shall be handled as little as possible and contact with sweated hands shall be strictly avoided.

7.2.2 The number of envelopes to be sampled from each lot shall be as given in Table 3.

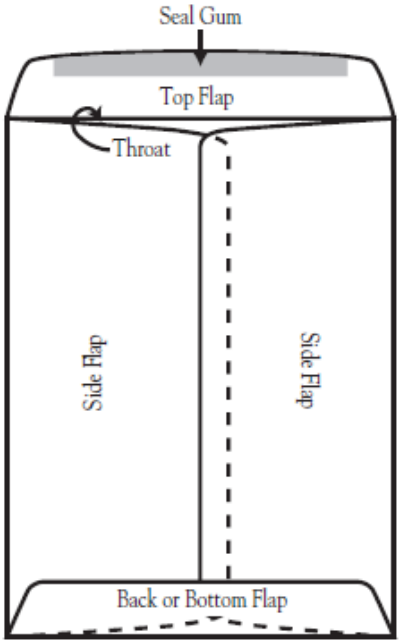
7.3 Criteria for Conformity

7.3.1 While conducting the tests for paper quality, no failure shall occur for the lot to be accepted as conforming to this specification.

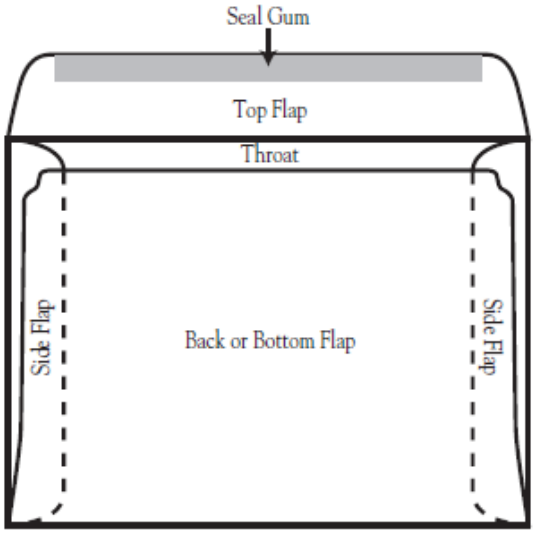
Table 3 — Scale of sampling Lot size

(Number of envelopes)	Sample size
Up to 100	5
101 to 150	8
151 to 300	13
301 to 500	20
501 to 1 000	32
1 001 to 3 000	50
3 001 to 10 000	80
10 001 and above	125

Annex A
(informative)
Envelope Construction Designs



Open End (Catalog)



Open Side (Booklet)

Bibliography

1. IS 13892 (1999): *Correspondence envelopes — Specification*
2. *A complete Reference Guide to Envelope Construction, Size and Conversion*, [viewed 2020-01-16]. Available at http://cmykprinting.com/resource-center/reference
3. *ZNS 558:2024, Envelope Specification*

