SRI LANKA STANDARD 3 : 2012

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SPECIFICATION FOR
PAPER SIZES
(First Revision)

SRI LANKA STANDARDS INSTITUTION

Sri Lanka Standard
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SLS 3 : 2012

Gr. 4

SRI LANKA STANDARDS INSTITUTION
17, Victoria Place
Elvitigala Mawatha
Colombo 08
Sri Lanka.

Sri Lanka Standards are subject to periodical revision in order to accommodate the progress made by industry. Suggestions for improvement will be recorded and brought to the notice of the Committees to which the revisions are entrusted.

This standard does not purport to include all the necessary provisions of a contract.

Sri Lanka Standard
SPECIFICATION FOR PAPER SIZES
(First Revision)

FOREWORD

This Sri Lanka Standard was approved by the Sectoral Committee on Paper Board and Packaging and was authorized for adoption and publication as a Sri Lanka Standard by the Council of Sri Lanka Standards Institution on 2012-01-27.

This specification was first published in 1967 and re-affirmed in 2000. In this First Revision, the C series of paper sizes has been included.

Logically planned system of paper sizes is used worldwide. This system of paper sizes is built upon a basic size of one square meter and every size in the range is related to the next in logical sequence and proportion. An alpha/numerical Code replaces such terms as octave, quarto etc., now used in the paper trade. The ISO sizes also permit the direct use of grammes per square meter in designating the mass of paper instead of the traditional but more cumbersome method of pounds per ream of 500 sheets or 480 sheets.

The range of sizes available in this system in smaller than in the present system, but it is adequate for all purposes.

For the purpose of deciding whether a particular requirement of this specification is complied with the final value, observed or calculated, expressing the result of a test or an analysis, shall be rounded off in accordance with **CS 102**. The number of significant places retained in the rounded off value shall be the same as that of the specified value in this specification.

1 SCOPE

This standard specifies the sizes of trimmed (finished) paper for administrative, commercial and technical purposes and for any printed materials.

2 REFERENCES

ISO 216 Writing paper and certain classes of printed matter- Trimmed sizes- A and B series and indication of machine direction

3 GENERAL REQUIREMENTS

3.1 The basic principles of the system and the derivation of the sizes given in the Appendix **A**.

NOTE : *A change-over from the existing system may not be immediately possible because existing machines for printing and finishing may not handle the new sizes in bulk with the same degree of economy as with the existing range of paper sizes, but since this system is gaining wide acceptance, printing machinery designed to handle these new sizes economically is now available and will come into grater use in the course of time.*

3.2 Principal and subsidiary series

The sizes of the principal and subsidiary series are designated by the letters A ,B or C indicating the series, and a number which indicates how many times the basic size of the series (known as A0) has to be divided (according to the principles of **A.1.2** of the Appendix **A**) to produce them.

3.3 Long sizes

Long sizes are designated by the designation of the original size preceded by the fraction into which this has been divided, for example : A 4 (210 mm x 297 mm) divided into four parts parallel to the shorter dimension is designated A 4.

4 TRIMMED SIZES

4.1 A – series of trimmed sizes

The sizes of the A-series are intended primarily or all kinds of stationery and printed matter described in Table **1**.

TABLE 1 - A – series of trimmed sizes

Designation	Size		Designation	Size	
	mm x mm	in x in		mm x mm	in x in
A 0	841 x 1189	33.11 x 46.81	A 5	148 x 210	5.83 x 8.27
			A 6	105 x 148	4.13 x 5.83
A 1	594 x 841	23.39 x 33.11	A 7	74 x 105	2.91 x 4.13
A 2	420 x 594	16.54 x 23.39	A 8	52 x 74	2.05 x 2.91
A 3	297 x 420	11.69 x 16.54	A 9	37 x 52	1.46 x 2.05
A 4	210 x 297	8.27 x 11.69	A10	26 x 37	1.02 x 1.46

4.2 B – series of trimmed sizes

The sizes of the B-series are intended for use only in exceptional circumstances, when sizes are needed intermediate between any two adjacent sizes of the A-series.

TABLE 2 - B – series of trimmed sizes

Designation	Size		Designation	Size	
	mm x mm	in x in		mm x mm	in x in
B 0	1000 x 1414	39.37 x 55.67	B 5	176 x 250	6.93 x 9.84
B 1	707 x 1000	27.83 x 39.37	B 6	125 x 176	4.92 x 6.93
B 2	500 x 707	19.68 x 27.83	B 7	88 x 125	3.46 x 4.92
B 3	353 x 500	13.90 x 19.68	B 8	62 x 88	2.44 x 3.46
B 4	250 x 353	9.84 x 13.90	B 9	44 x 62	1.73 x 2.44
			B10	31 x 44	1.22 x 1.73

4.3 C – series of trimmed sizes

The C-series is used for folders, post cards and envelops.

TABLE 3 - C – series

Designation	Size	
	mm x mm	in x in
C 0	917 x 1237	36.10 x 51.08
C 1	648 x 917	25.51 x 36.10
C 2	458 x 648	18.03 x 25.51
C 3	324 x 458	12.76 x 18.03
C 4	229 x 324	9.02 x 12.76
C 5	162 x 229	6.38 x 9.02
C 6	114 x 162	4.49 x 6.38
C 7	81 x 114	3.19 x 4.49
C 8	57 x 81	2.25 x 3.19

4.4 Long sizes

These sizes are intended for use for labels, tickets and similar products.

TABLE 4 – Long sizes

Designation	Size	
	mm x mm	in x in
1/3 A4	99 x 110	3.90 x 8.27
¼ A 4	74 x 210	2.91 x 6.27
1/8 A 7	13 x 74	0.51 x 2.91

5 TOLERANCES

The trimmed sizes of the A and B series are subject to the following tolerances :

For dimensions up to and including 150 mm ± 1.5 mm
For dimensions greater than 150 mm up to and including 600 mm ± 2 mm
For dimensions greater than 600 mm ± 3 mm

APPENDIX A
UNDERLYING PRINCIPLES

A.1. BASIC PRINCIPLES

A.1.1 The basic shape of the system is a rectangle where the diagonal of a square becomes the long side of the rectangle based on this square. See Figure **1**. Thus the ratio of the sides is expressed by the equation.

$$x : y = 1 : \sqrt{2}$$

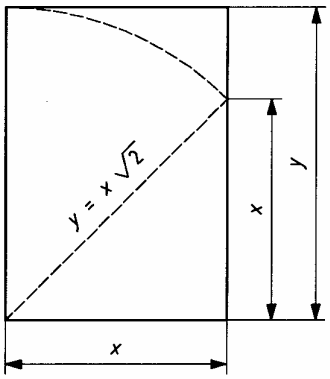

FIGURE 1 – The basic shape

A.1.2 Each size is obtained by dividing the size immediately above it in to two equal parts, the division being parallel to the shorter side.

A.1.3 The areas of the two successive sizes are in the ratio 2 : 1 and all the sizes in each series are geometrically similar to one another.

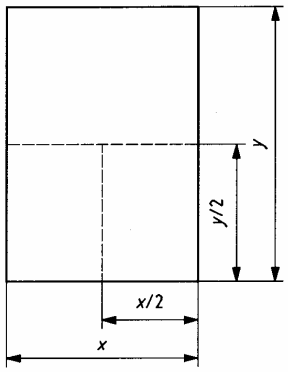

FIGURE 2 – The halving principle

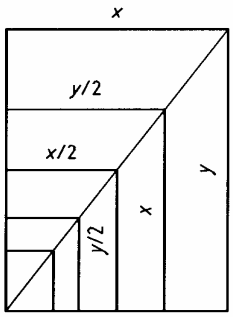

FIGURE 3 – Geometrical similarity of sizes

A.2 THE PRINCIPAL SERIES

The basic size of the principal series (A_0) has an area of 1 square metre, so that,

$xy = 1\ m^2$

Therefore $x : y = 1 : \sqrt{2}$

$xy = 1$

giving the following lengths of he sides for the basic size :

x = 0.841 m
y = 1.189 m

The *A series* is derived from this basic size by applying the principle explained in **A.1.2.**

A.3 SUBSIDIARY SERIES

A subsidiary series is obtained by placing the geometrical mean between adjacent sizes of the *A series* in sequence, so that the same proportions are retained. This series is known as the *B series*.

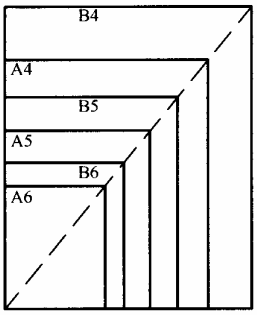

FIGURE 4 - Relationship of B series to A series

A.4 LONG SIZES

Long sizes are obtained dividing any appropriate sizes from the two series previously mentioned, into three, four or eight equal parts, parallel with the shorter side in such a manner that the proportions indicated in **A.1** are not maintained, the ratio between the longer and the shorter sides being greater than √2: 1. Long sizes should in practice be produced from the A series only.

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SRI LANKA STANDARDS INSTITUTION

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Printed at the Sri Lanka Standards Institution, 17, Victoria Place, Elvitigala Mawatha, Colombo 08

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