SRI LANKA STANDARD 808 : 1988

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METHOD FOR
SAMPLING OF PAPER AND BOARD

SRI LANKA STANDARDS INSTITUTION

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SLS 808:1988

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SRI LANKA STANDARDS INSTITUTION
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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

METHOD FOR SAMPLING OF PAPER AND BOARD

FOREWORD

This Sri Lanka Standard was authorized for adoption and publication by the Council of the Sri Lanka Standards Institution on 1988-01-25, after the draft, finalized by the Drafting Committee on Paper and Board, had been approved by the Chemicals Divisional Committee.

This standard covers the method of sampling of paper and board including both solid and corrugated fibreboard. This standard describes the procedure for selecting representative samples from a lot for the purpose of determining conformity of the lot to the requirements of a relevant product standard. Criteria for conformity of the lot is not dealt with in this standard and it shall be as given in the relevant product standard. In this connection, guidance may be obtained from the publications of the International Organization for Standardization on attribute sampling plans and variable sampling plans.

All values in this standard are given in SI units.

In the preparation of this standard the assistance obtained from the publications of the International Organization for Standardization, the British Standards Institution, the Bureau of Indian Standards, the American Society for Testing and Materials and the Technical Association of Pulp and Paper Industry is gratefully acknowledged.

1 SCOPE

1.1 This standard prescribes the method of sampling of paper and board for the purpose of determining conformity of a lot to the requirements of a relevant product standard.

1.2 Any deviations required, in case of a specific product shall be as indicated in the relevant product standards.

2 REFERENCES

SLS 102 Presentation of numerical values.

SLS 428 Random sampling methods.

3 DEFINITIONS

For the purpose of this standard the following definitions shall apply:

3.1 lot : The quantity of paper or board of a single type, grade, substance, thickness and composition, manufactured under conditions that are presumed uniform and available for inspection at one time shall constitute a lot (see Note).

NOTE - A lot comprises one or more nominally identical units, which may be reams or reels.

3.2 sheet : Paper or board drawn from a selected unit (see 3.5).

3.3 specimen : An area of a paper or a board cut to given dimensions from the sheets.

3.4 test piece : A specimen or a portion of specimen cut to given dimension upon which the determination is carried out as prescribed in the method of test (see Note).

NOTE - A detailed description of the appropriate test piece should be given in the applicable method of test or relevant product standard.

3.5 unit : A quantity of paper or board of a single type, grade, substance, thickness and composition, packed together for convenience in sale, handling and accounting.

4 GENERAL REQUIREMENTS OF SAMPLING

4.1 Samples shall not be taken from an exposed place.

4.2 Care shall be taken to select samples from reams or reels that are not damaged. It is necessary to discard a few outermost sheets of reams or the first few layers of reels to ensure that samples obtained are representative.

4.3 Samples shall be kept flat, free from wrinkles and folds. They shall be protected from exposure to direct sunlight, liquids, varying humidity conditions and any other harmful influences.

4.4 Care shall be taken in handling samples as contact with the hands can appreciably affect the chemical, physical, optical surface or other characteristics of the paper.

4.5 Samples to be tested for moisture shall be placed immediately after sampling in an air-tight container.

4.6 Samples to be tested for strength characteristic shall not be taken from papers having water mark, creases or any visible imperfections.

4.7 Each sample shall be provided with identification marks sufficient to ensure that it can be recognized beyond any doubt.

5 IDENTIFICATION OF A LOT

Lot shall be identified in accordance with 3.1. If an inspection lot consists of different batches of manufacture, then the inspection lot shall be divided into sub-lots in which each sub-lot conforms to the definition of lot.

6 SCALE OF SAMPLING

The units and sheets shall be selected at random in order to ensure randomness of selection. Random number tables given in SLS 428 shall be used.

6.1 Selection of units

The number of units to be selected from the lot shall be in accordance with the following table.

TABLE - Scale of sampling

Number of units in the lot	Number of units to be selected
Up to 5	All
6 to 100	05
101 to 300	08
301 to 500	13
501 and above	20

6.2 Selection of sheets

6.2.1 The number of sheets to be taken from each selected unit shall depend on number of tests to be carried out on the lot as a whole or on each individual unit or both as specified in the relevant product standard.

6.2.2 As far as possible an equal number of sheets shall be obtained from each selected unit.

6.2.3 *Selection of sheets from a ream*

The requisite number of sheets shall be selected from the ream after removing the three outermost sheets and all damaged sheets.

6.2.4 *Selection of sheets from a reel*

All damaged layers from the outside of the reel shall be removed. Three undamaged layers of paper (substance not exceeding 224 g/m^2) or the undamaged layer of board (substance exceeding 224 g/m^2) shall be discarded. Reel shall be cut across its full width to a sufficient depth to enable the requisite number of sheets to be taken.

7 SELECTION AND CUTTING OF SPECIMENS

7.1 Specimens shall be cut from each sheet selected as in **6.2.3** or **6.2.4**.

7.2 The dimensions of specimens shall be approximately 300 mm x 450 mm and the greater dimension shall be in the machine direction. If the machine direction is not known, the dimensions of specimens shall be approximately 400 mm x 400 mm.

7.3 According to the size of the sheet available, the test specimen shall be obtained as follows:

7.3.1 If the sheets selected from a ream have dimensions greater than 300 mm x 450 mm, one specimen shall be cut from each selected sheet varying the position of selection every time.

7.3.2 If the sheets selected from a reel have dimensions greater than 300 mm x 450 mm specimens shall be cut from each sheet corresponding to each 400 mm across the width of the reel.

7.3.3 If the sheets selected have one dimension or both below 300 mm and 450 mm but the surface area of the sheet is greater than 0.1 m^2, specimens shall be cut from each sheet selected in such a manner that its surface area is as near as possible to 0.1 m^2, preferably a little greater.

.3.4 If the surface area of each sheet selected is less than 0.1 m^2 the sheets selected shall constitute specimens (see Note).

NOTE - The number of sheets selected should be sufficient to provide the necessary surface area to carry out the tests required.

7.4 The number of specimens or test pieces required to obtain test results shall be given in the relevant product standard or applicable method of test.

8 RE-SAMPLING

8.1 If re-sampling is necessary, as a result of an accident during sampling or testing, a new sample shall be taken as given in this standard. It is permitted for the selection to be made from the same units as before, unless otherwise indicated.

8.2 In other circumstances, if re-sampling is deemed necessary, the procedure adopted shall have due regard for the method described in this standard.

9 CRITERIA FOR CONFORMITY

Criteria for conformity shall be given in the relevant product standard.

10 SAMPLING REPORT

The sampling report shall include the following information:

a) Reference to the relevant product standard;

b) Name and address of the purchaser;

c) Name and address of the vendor;

d) Reference of the consignment;

e) References of the lot and the unit, if necessary;

f) Description of the lot (whether reams or reels);

g) Number of units in the lot;

h) Number of units selected;

j) Number of sheets selected from each unit;

k) Date of sampling;

m) Name and signature of the person drawing the sample;

n) Location of sampling (mill, warehouse etc.);

p) Place of sampling; and

q) Any deviation from the method of sampling specified.

SLS CERTIFICATION MARK

The Sri Lanka Standards Institution is the owner of the registered certification mark shown below. Beneath the mark, the number of the Sri Lanka Standard relevant to the product is indicated. This mark may be used only by those who have obtained permits under the SLS certification marks scheme. The presence of this mark on or in relation to a product conveys the assurance that they have been produced to comply with the requirements of the relevant Sri Lanka Standard under a well designed system of quality control inspection and testing operated by the manufacturer and supervised by the SLSI *which includes surveillance inspection of the factory, testing of both factory and market samples.*

Further particulars of the terms and conditions of the permit may be obtained from the Sri *Lanka Standards Institution, 17, Victoria Place, Elvitigala Mawatha, Colombo 08.*

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SRI LANKA STANDARDS INSTITUTION

The Sri Lanka Standards Institution (SLSI) is the National Standards Organization of Sri Lanka established under the Sri Lanka Standards Institution Act No. 6 of 1984 which repealed and replaced the Bureau of Ceylon Standards Act No. 38 of 1964. The Institution functions under the Ministry of Science & Technology.

The principal objects of the Institution as set out in the Act are to prepare standards and promote their adoption, to provide facilities for examination and testing of products, to operate a Certification Marks Scheme, to certify the quality of products meant for local consumption or exports and to promote standardization and quality control by educational, consultancy and research activity.

The Institution is financed by Government grants, and by the income from the sale of its publications and other services offered for Industry and Business Sector. Financial and administrative control is vested in a Council appointed in accordance with the provisions of the Act.

The development and formulation of National Standards is carried out by Technical Experts and representatives of other interest groups, assisted by the permanent officers of the Institution. These Technical Committees are appointed under the purview of the Sectoral Committees which in turn are appointed by the Council. The Sectoral Committees give the final Technical approval for the Draft National Standards prior to the approval by the Council of the SLSI.

All members of the Technical and Sectoral Committees render their services in an honorary capacity. In this process the Institution endeavours to ensure adequate representation of all view points.

In the International field the Institution represents Sri Lanka in the International Organization for Standardization (ISO), and participates in such fields of standardization as are of special interest to Sri Lanka.

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