

මෙය රාජ්‍ය භාෂාවෙන් වෙනම මුද්‍රණය කර ඇත.

ශ්‍රී ලංකා ප්‍රමිති 218 : 1973

SRI LANKA STANDARD 218 : 1973

විශ්ව දශම වර්ග කිරීම UDC 745: 582.925

අත්කම් බඩු (කළු වර බඩු)
පිලිබඳ පිරිවිතර

**SPECIFICATION FOR
HANDICRAFT ITEMS
(EBONYWARE)**

ලංකා ප්‍රමිති කාර්යාංශය

BUREAU OF CEYLON STANDARDS

SPECIFICATION FOR HANDICRAFT ITEMS (EBONYWARE)

S.L.S. 218 : 1973

Gr. 3



Copyright Reserved

BUREAU OF CEYLON STANDARDS

58, DHARMAPALA MAWATHA,
COLOMBO 3.

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.

BUREAU OF CEYLON STANDARDS
53, DHARMAPALA MAWATHA,
COLOMBO-3.

Telephone : 26055
26054
26051

Telegrams : "PRAMIKA"

SRI LANKA

STANDARD SPECIFICATION FOR HANDICRAFT ITEMS (EBONYWARE)

FOREWORD

This Sri Lanka Standard Specification has been prepared by the Drafting Committee on Handicraft items. It was approved by the Civil Engineering Divisional Committee of the Bureau of Ceylon Standards and was authorised for adoption and publication by the Council of the Bureau on 10th September, 1973.

It is found that quality, workmanship and finish are at present varying considerably. Hence, this standard is intended to provide general guidance on the quality of wood and finish, especially for export purposes. The seasoning schedule specified should be strictly adhered to if the particular items is to be exported.

The moisture content of a fully seasoned piece of wood depends mainly upon the atmospheric conditions prevailing in the locality in which it is seasoned, although the species of the wood and the cross-section of the piece also have an important bearing. The moisture content of seasoned wood changes from season to season depending chiefly upon the fluctuations in atmosphere, temperature and humidity. The application of paint or varnish to the surface of timber reduces changes in moisture content with changes in humidity of the surrounding air. Dipping or pressure treatment with oil or creosote-oil mixture also has a similar effect. However, it is essential that it should conform to the optimum moisture content indicated. Also, to facilitate placing of orders by local and foreign buyers, the finish has been graded.

The standard temperature given in Table 1 is in degree Celsius. The converted values in fahrenheit are given within brackets for the convenience of the industry.

1. SCOPE

This Ceylon Standard Specification covers the type of timber, the corresponding seasoning procedure and finish for handicraft items made out of ebony. It does not cover the mode of manufacture.

2. TERMINOLOGY

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

- 2.1 **Air-seasoning**—Seasoning done in open air, usually protected from sun and rain.
- 2.2 **Bonding**—The process of uniting two or more pieces of wood or veneers by means of an adhesive. This process is characterised by continuity of the union over the whole area in contact.
- 2.3 **Conditioning**—The process designed to suit the moisture content of timbers to the conditions and purposes for which it is to be used.
- 2.4 **Equilibrium moisture content**—The moisture content which is attained by wood when placed in a constant condition of temperature and humidity.
- 2.5 **Wood-wool**—Long, narrow, curling wood shavings used as packing material.
- 2.6 **Kiln-seasoning**—The process of artificial drying of timber in a kiln under controlled conditions of temperature, air movement and humidity to a predetermined moisture content.
- 2.7 **Knot**—A branch base or limb embedded in the tree or timber by natural growth.
- 2.8 **Moisture content**—The weight of water present in wood expressed as a percentage of its oven-dry weight.
- 2.9 **Full gloss**—A term used about enamels, varnishes and paints meaning that they possess a high gloss finish when dry, as opposed to semi gloss, egg shell or matt finishes.
- 2.10 **Semi gloss**—The term applied to a material which is designed to present a higher degree of gloss than a flat or egg shell shean product, but which has not the mirror-like appearance of a full gloss paint.
- 2.11 **Egg shell finish**—A term for a finish which is not completely flat or matt, but which presents instead a slight shean or lustre similar to the shean on an egg shell.
- 2.12 **Flat (matt)**—Possessing no shean or lustre.

3. REQUIREMENTS

- 3.1 Timber**—Good quality timber free of sapwood conditioned according to Clause 4 of this standard and without any cracks shall be used.
- 3.2 Dimensions**—Dimensions of items such as height shall be in millimetres.
- 3.2.1 Tolerance**—The tolerance on nominal dimensions specified shall be +5 percent.
- 3.3 Finish**—Any type of finish can be used; provided it conforms to Clause 5 of this standard. Toxic finishes shall not be permitted. No pigmented finish or dyed finish (e. g. boot polish) shall be permitted.

4. SEASONING METHODS

Seasoning methods are classified as follows:

- (a) Air seasoning.
- (b) Kiln seasoning.
- 4.1 Air-seasoning**—The seasoning procedure shall conform to the method specified in C. S. 159: Ceylon Standard Code of Practice for Seasoning of Timber.
- 4.2 Kiln-seasoning**
- 4.2.1** The seasoning procedure shall conform to the method specified in C. S. 159 Ceylon Standard Code of Practice for Seasoning of Timber.
- 4.2.2 Kiln schedule**—The schedule recommended for ebony is given in Table 1. The seasoning of timber (ebony) is started at a comparatively lower temperature and higher humidity. These conditions are gradually altered as the timber dries, until towards the end of seasoning, when the temperature of the air inside the kiln is fairly high and the humidity is low.

The average moisture content of the wettest half of the total number of samples may be taken as a guide for making changes in the kiln schedule in preference to one single sample which happens to be the wettest. This refers to the study of rate of drying of timber and changes in kiln schedule to be made during kiln drying of timber (ebony).

Table 1—Recommended Kiln Drying Schedule for Ebony

Moisture Content (per cent) of the Wettest Timber on the Air Inlet Side at which Changes are to be made	Temperature Dry Bulb		Temperature Wet Bulb		Relative humidity (percent)
	C	(F)	C	(F)	
Green	40.5	(105)	38.0	(101)	85
60	40.5	(105)	37.0	(99)	80
40	43.5	(110)	39.0	(102)	75
35	43.5	(110)	38.0	(100)	70
30	46.0	(115)	39.5	(103)	65
25	51.5	(125)	43.0	(109)	60
20	60.0	(140)	47.5	(118)	50
15	65.5	(150)	49.0	(121)	40

4.3 Moisture content

- 4.3.1 Maximum permissible moisture content**—The maximum permissible moisture content for these handcraft items shall be 15 percent.

5. FINISH

5.1 Requirements of an unfinished item

- 5.1.1** Colouring of sapwood using chemicals shall not be permitted.
- 5.1.2** Decayed ebony sections shall not be permitted to be patched with other type of timber.
- 5.1.3** The item shall be free of cracks. Shellac or any other filler shall not be used for fillings.
- 5.1.4** Screws or nails may be used only when fixing upward projections.

5.2 **Graded finish**—The finishes of ebonyware handicraft items shall be graded as follows:

- (a) Full-gloss
- (b) Semi-gloss
- (c) Egg-shell
- (d) Flat

6. TESTS

6.1 **Determination of the type of timber (Drilling Test)**—The type of timber (ebony) used shall be determined by drilling at a suitable point of the base of that particular handicraft item.

6.2 **Determination of moisture content (Moisture Content Test)**

6.2.1 **Electrical method**—Electrical moisture meters shall be used. When taking readings, the following rules shall apply:

- (a) Correction figures for ebony, pre-determined by oven-drying method, shall be used to calculate the correct reading.
- (b) Ebony handicraft items shall not be hot or surface-wet or contain large moisture gradients due to painting, preservative treating or due to a wet core.
- (c) Readings shall be taken at 3 different points, and the average reading taken for the item under test.

6.2.2 **Oven-dry method**—Any dispute concerning the moisture content shall be decided by recourse to the oven-drying method as described in C. S. 159: Ceylon Standard Code of Practice for Seasoning of Timber.

7. SAMPLING AND INSPECTION

7.1 **Sampling**

7.1.1 **Lot**—In any batch all items of the same class and same dimensions shall be grouped together to constitute a lot.

- 7.2 Sample size and criterion for conformity**—In any lot, the sample size shall be 2 percent with a minimum of 5 per consignment. The samples shall conform to both tests specified in Clauses 6.1 and 6.2.

8. PACKING AND MARKING

- 8.1 Packing**—Each handicraft item shall be packed in polythene bags/cartons (not air-sealed). These in turn are arranged in cardboard or wooden boxes with wood-wool, wood-shavings or paper cuttings in an orderly manner such that no movement is possible.
- 8.2 Marking**—Each box shall be legibly and indelibly marked with the following:
- (i) Description of goods.
 - (ii) Name of Manufacturer/exporter.
 - (iii) Country of origin.

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.



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.