

SRI LANKA STANDARD 1207 : Part 2 : 2001

UDC 685.555

**SPECIFICATION FOR
UMBRELLA
PART 2 : FOLDING UMBRELLA**

SRI LANKA STANDARDS INSTITUTION

SLS 1207 Part 2 : 2001

**SPECIFICATION FOR UMBRELLA
PART 2 : FOLDING UMBRELLA**

SLS 1207 Part 2 : 2001

Gr. 5

**Sri Lanka Standards Institution
No. 17, Victoria Place
Elvitigala Mawatha
Colombo - 08.
Sri Lanka.**

**SRI LANKA STANDARD
SPECIFICATION FOR UMBRELLA
PART 2 : FOLDING UMBRELLA**

FOREWORD

This standard was approved by the Sectoral Committee on Textiles, Clothing and Leather and was authorized for adoption and publication as a Sri Lanka Standard by the Council of the Sri Lanka Standards Institution on 2001-02-08.

Umbrella is a widely used consumer item that needs to be standardized for the benefit of both the consumer and manufacturer. This standard consists of two parts:

Part 1 : Non-folding umbrella

Part 2 : Folding umbrella

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.

Guidelines for the determination of a compliance of a lot with the requirements of this standard based on statistical sampling and inspection are given in **Appendix A**.

In the preparation of this standard the assistance derived from the following publication is gratefully acknowledged :

IS 10675 : 1983 (1991) Indian Standard Specification for Umbrellas, folding , manual

1 SCOPE

This specification prescribes the requirements for folding umbrella.

2 REFERENCES

- CS 102 : Presentation of numerical values
- CS 195 : Cotton umbrella cloth
- SLS 321 : Umbrella ribs

SLS 1207 Part 2 : 2001

SLS 428 : Random sampling methods

SLS 445 : Umbrella fittings

SLS 757 : Polyester sewing thread

SLS 1160 : Nylon umbrella cloth

3 TYPES

Folding umbrella shall be of following two types :

Two folding

Three folding

4 REQUIREMENTS

4.1 Components (See Figures 1 and 2)

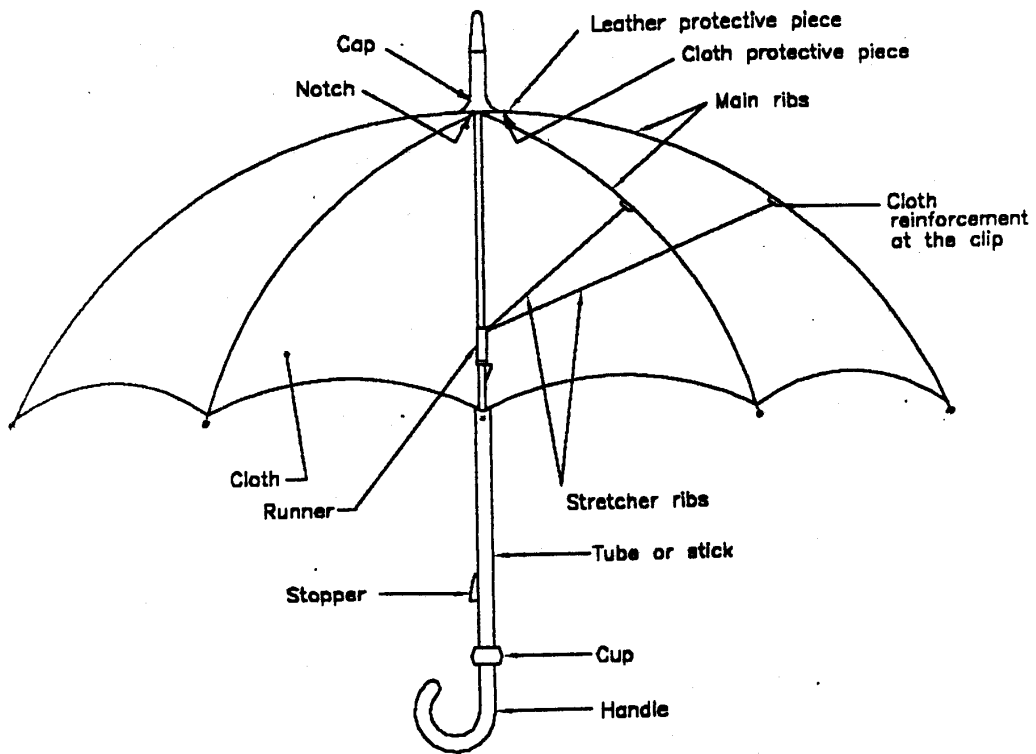


FIGURE 1 - Diagram of non-folding umbrella

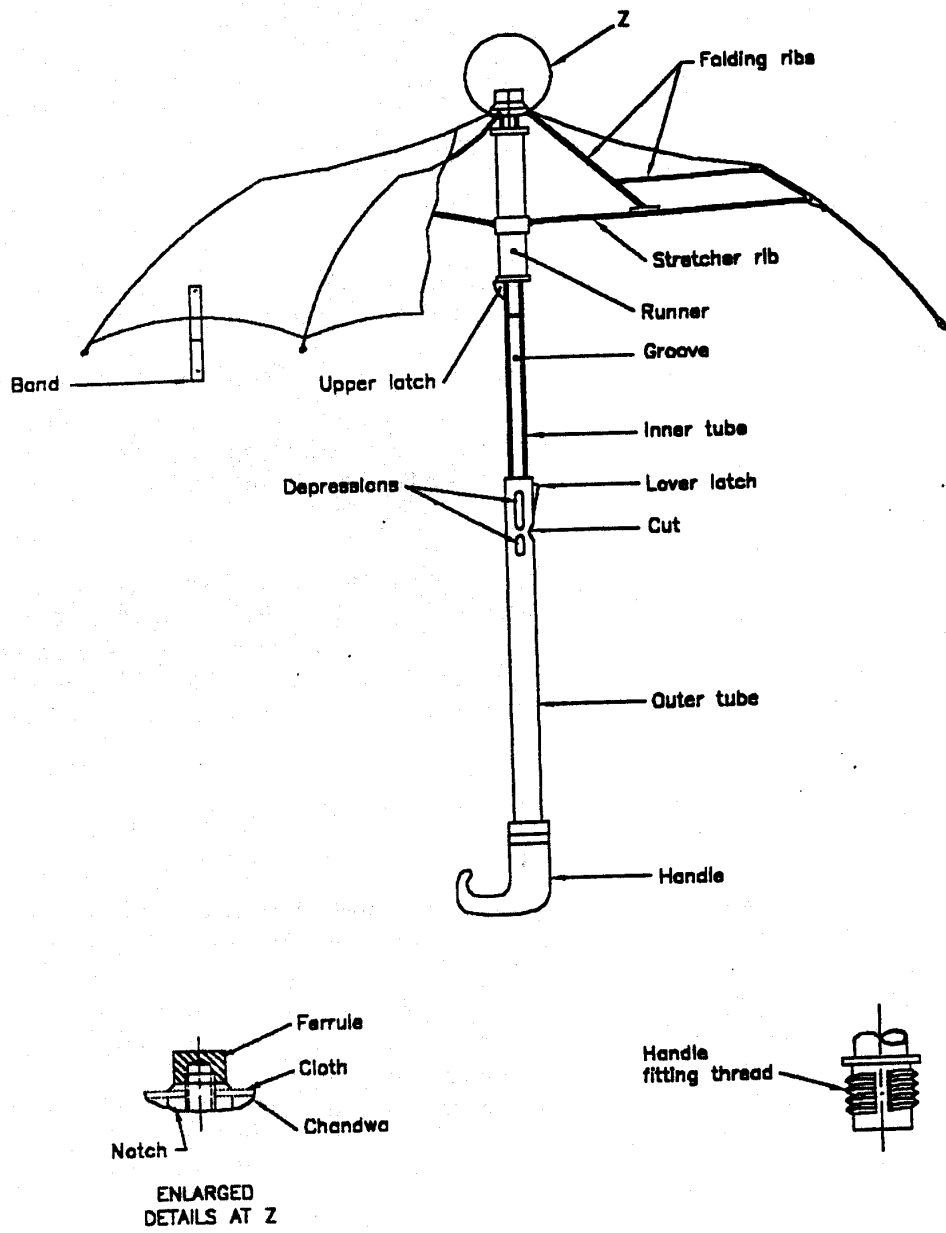


FIGURE 2 - Diagram of Three folding Umbrella

4.1.1 The main ribs and stretcher ribs used shall conform to **SLS 321**.

4.1.2 The runner, notch, cap and ferrule used shall conform to **SLS 445**.

4.1.3 The cloth used shall conform to **CS 195** or **SLS 1160**.

4.1.4 The inner and outer tubes shall be made out of cold rolled steel sheet.

4.2 Workmanship

4.2.1 The minimum number of main ribs in an umbrella shall be six. The horizontal distance (D) from edge of the panel to stick (see Figures 1 and 2) shall be not less than 85 per cent of the length of the main rib (R).

4.2.2 The main ribs shall be of folding type; that is, consisting of two ribs stretching along with the cloth. The foldable ribs joint shall be such that while folding the umbrella, it functions smoothly and does not damage the umbrella cloth.

4.2.3 The notch shall be rigidly and firmly fixed on to the tube. The ribs shall be fastened on the notch by means of brass, copper or galvanized wire of 1 mm diameter so that ribs have no undue play or shake. The ends of the wire shall be turned in so that they do not touch the cloth of the umbrella.

4.2.4 The inner and outer tube shall be straight. The outer diameter of inner tube shall be such that it can smoothly slide inside the outer tube when the umbrella is folded. It shall not have any undesired shake or play inside the outer tube. The inner tube shall have a groove along its length while the outer tube shall have a depression to suit the groove. The tube shall be chromium or nickel plated. The surface of the tubes shall be smooth and free from burrs and other surface defects.

4.2.5 The upper lock shall be properly fitted at the tube, and when depressed and released ten times with the thumb, it shall return to normal position.

4.2.6 The handle shall be fixed to the tube in such a manner that when the handle is subjected to a pull of **50 N** for one minute, it shall not break or get detached from the tube.

4.2.7 The cloth shall be suitably cut in panels and firmly stitched together by strong sewing thread conforming to Ticket Number 120 or better of Table 1 of **SLS 757 : 1993**. Colour fastness of the thread to washing and light shall conform to Table 2 of **SLS 757 : 1993**. The shade of the thread shall be as agreed to between the buyer and seller. The minimum number of stitches per 10 mm shall be four.

NOTE

In the event of seeking a test certificate on umbrella, it is advised to produce a sample of threads used for stitching along with the umbrella sample.

Edge of umbrella cloth shall be of natural border (selvedged) or stitched. If stitched, the minimum number of stitches per 25 mm shall be eight.

4.2.7 The cloth shall be stitched firmly to the holes at the ends of the ribs with a minimum of five stitches including tying stitches and also suitably stitched at the junction of the main ribs and stretcher ribs. At the top, the cloth shall be bound with a sewing thread wound round five times and so stitched that each seam gets one stitch and the thread travel spirally around the wound thread, finishing the work with two knots at the last seam. The seams shall not yield or bulge and the cloth shall not be slack or show any other defect when the umbrella is fully opened. The stitching thread shall not be visible on the outer surface.

4.2.8 A plastic or cloth piece shall be placed at the top above the notch and under the cloth. A plastic or waterproof cloth known as chandwa may be fitted over the cloth under the ferrule.

4.2.9 The umbrella cloth shall be provided with a band with suitable means for wrapping the cloth when the umbrella is closed.

4.2.10 The umbrella shall be capable of being opened and closed smoothly without the runner getting stuck. When opened, the umbrella shall have a symmetrical shape. In the case of flexus ribs, the umbrella shall close automatically when the stopper is pressed.

4.2.11 After opening and closing the umbrella 50 times in an uniform manner, the ribs shall not show any deformation and the cloth shall not show any signs of opening of seams or bulging. Folding system shall function smoothly and properly.

5 PACKAGING

Each umbrella shall be suitably packed as agreed to between the purchaser and the supplier. Minimum of six umbrellas shall be packed in a bundle.

6 MARKING

Each umbrella and bundle of umbrella shall be marked or labelled with the following :

- a) Type and/or size of umbrella;
- b) Name and contact number of the manufacturer;
- c) Registered trade mark, if any; and
- d) Batch/code number.

NOTE

Attention is drawn to the certification marking facilities offered by the Sri Lanka Standards Institution. See the inside back cover of the standard.

APPENDIX A COMPLIANCE OF A LOT

The sampling scheme given in this Appendix should be applied where compliance of a lot to the requirements of this standard is to be assessed based on statistical sampling and inspection.

Where compliance with this standard is to be assured based on manufacturing control system coupled with type testing and check tests of any other procedure, appropriate schemes of sampling and inspection should be adopted.

A.1 LOT

In any consignment all umbrellas of same type and size belonging to one batch of manufacture or supply shall constitute a lot.

A.2 SCALE OF SAMPLING

A.2.1 Number of umbrellas to be selected from a lot shall be in accordance with Table 1.

TABLE 1 - Scale of sampling

Number of umbrellas in the lot	Number of umbrellas to be selected
Up to 150	05
151 - 250	08
251 - 500	10
501 and above	13

A.2.2 Umbrellas shall be selected at random. In order to ensure randomness of selection random number tables as given in **SLS 428** shall be used.

A.3 NUMBER OF TESTS

A.3.1 Each umbrella selected as in **A.2.1** shall be inspected for marking and packaging requirements.

A.3.2 Each umbrella selected as in **A.2.1** shall be inspected for requirements given in **4.2**.

A.4 CRITERIA FOR CONFORMITY

A lot shall be declared as conforming to the requirements of this specification if the following conditions are satisfied :

A.4.1 Each umbrella inspected as **A.3.1** satisfies the marking and packaging requirements.

A.4.2 Each umbrella inspected **A.3.2** satisfies the relevant requirements.
