SRI LANKA STANDARD 493:1980
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SPECIFICATION FOR GALVANIZED WIRE NETTING

BUREAU OF CEYLON STANDARDS

SPECIFICATION FOR GALVANIZED WIRE NETTING

SLS 493:1980

(Attached AMD 380)

Gr. 4

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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.

AMENDMENT NO. 1 APPROVED ON 2008.12.19
TO SLS 493 :1980

SRI LANKA STANDARD SPECIFICATION FOR GALVANIZED WIRE NETTING

Clause 7.2

Delete the existing text and substitute with the following:

"If the netting is fabricated from galvanized wire, the coating shall conform to Class D of SLS 139."

Clause 9

Delete the existing text of (a) and substitute with the following and include (d) at the end.

a) Manufacturer's name and address, and/or trade mark, and batch no.

d) Class of coating

SRI LANKA STANDARD
SPECIFICATION FOR GALVANIZED WIRE NETTING

FOREWORD

This Sri Lanka Standard was authorized for adoption and publication by the Council of the Bureau of Ceylon Standards on 1980-10-31, after the draft, finalized by the Drafting Committee on Steel had been approved by the Civil Engineering Divisional Committee.

Hexagonal wire netting, in general is used mainly as enclosures for domestic animals and birds, in the agricultural field, as partitions in domestic buildings and as light reinforcement for special applications of plaster work.

Quantities and dimensions specified in this specification are given in SI units. However, for the purpose of designating the mesh size of wire netting, metric and equivalent inch sizes are included.

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 observation shall be rounded off in accordance with CS 102. The number of figures to be retained in the rounded off value shall be the same as that of the specified value in this specification.

In the preparation of this specification valuable assistance derived from the publication of the British Standards Institution and the Indian Standards Institution is gratefully acknowledged.

1 SCOPE

This standard specifies requirements for galvanized wire netting, having meshes of hexagonal shape, either woven from galvanized wire or woven from annealed wire for galvanizing after fabrication.

2 REFERENCES

CS 102 Presentation of numerical values

CS 121 Methods of testing weight, thickness, uniformity of coating on hot-dipped galvanized articles

CS 139 Mild steel wire for general engineering purposes

SLS 428 Random sampling methods

SLS 482 Code of practice for hot-dip galvanizing of iron and steel

3 TERMINOLOGY

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

3.1 wire: Wire made of mild steel of uniform section and conforming to CS 139.

3.2 wire netting: Wire netting woven so as to produce hexagonal openings of uniform size. The weave may be of standard twist as in Figure 1a or reversed twist as in Figure 1b.

3.3 mesh size: Size of mesh shall be taken as the internal distance between two opposite sides of the hexagon that would be formed in the mesh as shown in Figure 2.

4 MATERIAL

The wire used in the manufacture of netting shall be annealed mild steel wire conforming to CS 139. The chemical composition of the wire shall be such that it will comply with the following limits for carbon, manganese, sulphur and phosphorus:

C : 0.15 per cent (max)

Mn : 0.60 per cent (max)

S : 0.06 per cent (max)

P : 0.065 per cent (max)

5 CONSTRUCTION

The netting shall be regularly woven to produce uniform hexagonal meshes or openings, to the sizes as specified in Tables 1 and 2. When finished, the surface of netting shall be even without any distortion. The wire netting shall be properly selvedged by one or more wires on each edge.

6 DIMENSIONS, MASS AND TOLERANCES

6.1 The dimensions and minimum mass per roll of wire netting shall be in accordance with Table 1.

6.2 The tolerances on mesh and width of netting shall be as shown in Table 2.

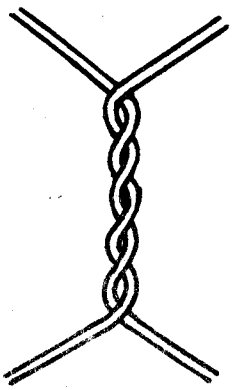

FIGURE 1a - Standard twist

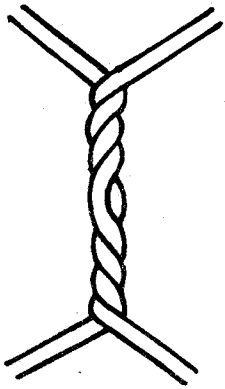

FIGURE 1b - Reversed twist

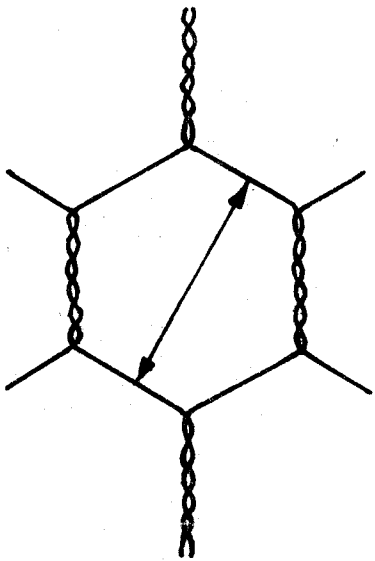

FIGURE 2 - Mesh size

TABLE 1 - Dimensions and minimum mass per roll of wire netting

Size of mesh mm (1)	Nominal inch size of mesh (2)	Nominal wire diameter, mm (3)	Minimum mass of roll of 1m x 50m, kg (4)
12	1/2	0.71	30
20	3/4	0.71	20
20	3/4	0.90	31
25	1	0.90	23
31	1 1/4	1.25	31
40	1 1/2	1.00	20
40	1 1/2	1.25	27
50	2	1.00	16
50	2	1.40	29

TABLE 2 - Tolerances on mesh and width of netting

Unit: mm

Size of mesh (1)	Tolerance of mesh (2)	Tolerance on width of netting (3)
12	+ 3	± 20
20	+ 4	± 20
25	+ 5	± 20
31	+ 6	± 25
40	+ 6	± 25
50	+10	± 50

7 GALVANIZING

7.1 Galvanizing shall be carried out in accordance with the procedure given in SLS 482 or as agreed to between the purchaser and supplier.

7.2 If the netting is fabricated from galvanized wire, the minimum zinc coating of the galvanized wire shall be 75 g/m^2 when measured in accordance with CS 121.

7.3 If the netting is galvanized after fabrication, it shall withstand the number of dips given in Table 3 when tested according to the Preece dip method given in CS 121.

TABLE 3 - Number of dips

Nominal diameter of wire in mm	Number of dips	
	1 min.	30 s.
1.40		
1.25		
1.00	1	1
0.91		
0.71	-	2

8 PACKING

The netting shall be supplied in rolls of 50 m or as otherwise specified by purchaser. When the wire netting is rolled into a package adequate provision shall be made to protect the leading end from being entangled during unrolling process.

9 MARKING

Each roll shall be clearly marked with the following informations:

a) Manufacturer's name and address and/or registered trade mark;

b) Size of roll (Width x Length); and

c) Size of mesh and diameter of wire.

10 SAMPLING AND TESTING

10.1 Scale of sampling

10.1.1 In any consignment all the rolls of wire netting of given mesh size and given wire diameter manufactured at the same place on any one date shall be grouped together to constitute a lot.

10.1.2 The number of rolls to be selected from a lot shall depend on the size of the lot and shall be in accordance with Columns 1 and 2 of Table 4.

10.1.3 The rolls shall be drawn at random. To ensure randomness of selection a random number table specified in SLS 428 shall be used.

TABLE 4 - Scale of sampling

Number of rolls in the lot (1)	Number of rolls to be selected (2)	Acceptance number (3)
Up to 25	3	0
26 to 65	4	1
66 to 180	5	1
181 to 500	7	1
Above 500	10	2

10.2 Test sample

10.2.1 For inspecting the requirements for mass and width of rolls, the samples selected in accordance with Column 2 of Table 4 shall constitute the test sample.

10.2.2 For testing the requirements for construction, mesh size, and galvanizing (see Note), a test piece of approximately 300 mm shall be cut from each roll, selected as in **10.2.1**, at a distance of not less than 600 mm from the end.

NOTE - Unless specially called for, chemical analysis of base wire and diameter of wire need not be carried out.

11 CRITERIA FOR CONFORMITY

The lot shall be considered as conforming to this specification if the following requirements are satisfied :

11.1 A roll of wire netting failing to satisfy any one or more of the requirements tested for in **10.2.1** and **10.2.2** shall be considered as a defective roll. The number of defective rolls in the test sample shall not exceed the corresponding acceptance number given in Column 3 of Table 4.

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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.*

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