Singapore Standard 292: 1984

SPECIFICATION FOR SAFETY NETS FOR CONSTRUCTION SITES

AMENDMENT NO. 1

November 1994

1. Page 5, Foreword

Delete the Foreword entirely and substitute with the following:

'This standard was prepared by the Technical Committee on Safety Nets for Construction Sites under the authority of the Building and Construction Industry Standards Committee.

The standard specifies the performance and testing of safety nets for use at duty heights up to six metres.

Acknowledgement is made for the use of information from the following overseas standards:

1.	ANSI A 10.11 : 1989	Construction and demolition operations - Personal and debris nets
2.	BS 3913 : 1982 (1984)	Industrial safety nets
3.	BS 8093 : 1991	Code of practice for the use of safety nets, containment nets and sheets on constructional works
4.	SS 240 : 1980	Ropes made from natural and synthetic fibres.'

2. Page 6, Clause 1, Scope

- (a) In the first paragraph, *delete* 'on high buildings or carrying out structural work' and *substitute* with 'at heights in construction sites'.
- (b) Delete the last sentence of the second paragraph.

3. Page 6, Clause 2, Definitions

Insert the following after Subclause 2.10:

'2.11 Competent Person. One who is capable of identifying existing and predictable hazards in the use of safety nets that are hazardous or dangerous to employees, and who has authorization to take prompt corrective measures to eliminate them.'

4. Page 7, Clause 3, Construction

Insert the following after Subclause 3.6:

'3.7 Overlay Nets. A safety net may be supplied with an overlay net for use with the safety net to catch small objects such as tools and debris but such overlay nets shall not be included when the safety net is subject to the tests described in Appendix A.'

5. Page 13, Appendix C

In the last paragraph of C.1, delete 'shall' and substitute with 'should'.

6. New Appendix D

Insert the following Appendix D after Appendix C:

APPENDIX D

INSTALLATION OF SAFETY NETS

D.1 GENERAL

The proper installation of safety nets will enhance a higher level of personnel safety and result in greater efficiency of production.

The user should note the following points when considering the use of safety nets:

- (a) Safety nets tend to suffer from damage or misuse and are particularly vulnerable to cutting and chaffing. Regular inspections and maintenance should be conducted by a competent person.
- (b) The effectiveness of safety nets is very dependent on the number and the quality of the fixings and this can be rapidly undermined if such fixings are not installed and maintained to the highest standards

NOTE. Detailed and comprehensive guidelines on the proper use of safety nets can be found in BS 8093: 1991.

D.2 DESIGN CONSIDERATIONS

The design of safety nets, supporting frameworks and their fixings should take into account all the various types of loadings including the effects of wind and rain.

D.3 INSTALLATION

Nets should be installed as close as possible to the working levels and in no case further below than the maximum distance marked on the label attached to the net or 6 m whichever the lesser. The gap between the net and the building should be as close as possible but in no case should this be more than 200 mm.

Nets should not be stretched taut when erected, but should have an initial sag of between a quarter and a fifth of the length of the shortest side. Because nets deflect when arresting a falling body, they require minimum clearance below, equal to two-thirds of the length of the shortest side or 2m, whichever is the greater plus $0.3 \, m$ for additional safety to prevent contact with surfaces or structures below. When erected, the safety nets should project horizontally a minimum of $(2 + 2/5 \, H)m$ beyond the outermost working position above the net, where H is the vertical distance in metres between the net and the outermost working point above (see Figure 2).

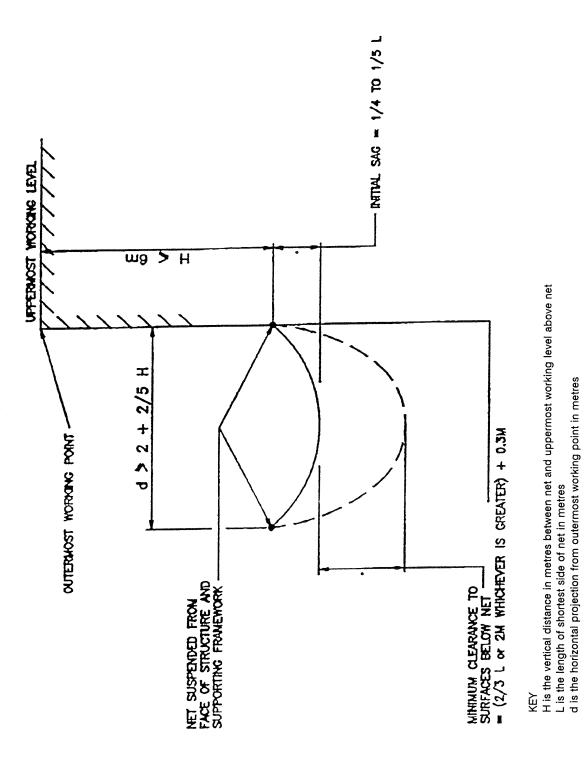
Supports for safety nets should be designed and installed so as to preclude their being impacted by falling debris or personnel. There should be no intervening members between the working surface and the net that could be impacted during a fall.

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The net should be securely attached to the supporting framework using tie cords, hooks, rings or thimbles. The tie cords, hooks, rings or thimbles should be equally spaced at intervals not greater than 750 mm along each side of the net and at each corner. They should be attached to the net to include the border cord and adjacent mesh cord of the net.

Connections between adjacent nets should be capable of developing a strength at least equal to that of the net and the advice given by the manufacturer should be closely followed.

Where cords are wrapped round sections with sharp edges, e.g. rolled steel sections, suitable packing should be provided to prevent damage. Where it is necessary to attach the edge of the net to a steel wire, the method of attachment should be such as to prevent chaffing or damage to the border cords or mesh cords.



NOTE. Supporting framework not shown.

Figure 2. Siting of safety net