

SINGAPORE STANDARD

Temporary edge protection systems – Product specification – Test methods



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specification – Test methods**

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Deputy Chairman	: Mr Seet Choh San	<i>Singapore Institution of Safety Officers</i>
Advisor	: Mr Chan Yew Kwong	<i>Individual Capacity</i>
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	Mr Ronald Tan	<i>Singapore Productivity Association</i>
	Mr Jonathan Wan	<i>Individual Capacity</i>
	Mr Wong Siu Tee	<i>JTC Corporation</i>
	Mr Winston Yew	<i>Workplace Safety and Health Council</i>

The Technical Committee on Workplace Safety and Health, appointed by the Quality and Safety Standards Committee, consists of representatives from the following organisations:

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		Mr Jonathan Tan Aik Leong	<i>The Institution of Engineers, Singapore</i>
		Mr Andrew Tan Hock Seng	<i>Land Transport Authority</i>
		Mr Tan Kim Heng	<i>TÜV SÜD PSB Pte Ltd</i>
		Mr Yeo Kim Hock	<i>Singapore Contractors Association Limited</i>

The Working Group on Temporary Edge Protection Systems, appointed by the Technical Committee to assist in the preparation of this standard, comprises the following experts who contribute in their *individual capacity*:

	Name
Co-Convenors	: Assoc Prof Goh Yang Miang Mr Hoe Yee Pin
Members	: Mr Chin Fook Onn Mr Damodaran s/o Subbarayan Er. Louis Hwang Mr Koh Keok Chuah Mr Peter Lee Er. Liao Wai Kun Mr Allan Low Yong Hui Er. Peter Ng Bee Hock Mr Tan Say Teong Mr Gregory Tay Chee Seng Mr Yusoof Aynuddin
Resource Member	: Mr Roy Peng

The organisations in which the experts of the Working Group are involved are:

Engineers 9000 Pte Ltd
Housing & Development Board
Keon Consult Pte Ltd
Land Transport Authority
Ministry of Manpower
MSA S. E. Asia Pte Ltd
PDS International Pte Ltd
SETSCO Services Pte Ltd
Singapore Contractors Association Limited
Singapore Institution of Safety Officers
The Institution of Engineers, Singapore
TÜV SÜD PSB Pte Ltd

National Foreword

This Singapore Standard was prepared by the Working Group on Temporary Edge Protection Systems appointed by the Technical Committee on Workplace Safety and Health under the purview of the Quality and Safety Standards Committee.

SS EN 13374 is the identical implementation of EN 13374:2013 – ‘Temporary edge protection systems – Product specification – Test methods’, and is adopted with permission of CEN, Avenue Marnix 17, B-1000 Brussels.

Attention is drawn to the following:

1. Where appropriate, the words, ‘this European Standard’ shall be read as ‘SS EN 13374’. The reference to European Standards shall be replaced by the following Singapore Standards:

European Standard	Corresponding Singapore Standard
EN 1990	SS EN 1990
EN 1991-1-4	SS EN 1991-1-4
EN 1993-1-1	SS EN 1993-1-1
EN 1993-1-2	SS EN 1993-1-2
EN 1993-1-3	SS EN 1993-1-3
EN 1993-1-4	SS EN 1993-1-4
EN 1993-1-5	SS EN 1993-1-5
EN 1993-1-6	SS EN 1993-1-6
EN 1993-1-7	SS EN 1993-1-7
EN 1993-1-8	SS EN 1993-1-8
EN 1993-1-9	SS EN 1993-1-9
EN 1993-1-10	SS EN 1993-1-10
EN 1993-1-11	SS EN 1993-1-11
EN 1993-1-12	SS EN 1993-1-12
EN 1993-2	SS EN 1993-2
EN 1993-3-1	SS EN 1993-3-1
EN 1993-3-2	SS EN 1993-3-2
EN 1993-4-1	SS EN 1993-4-1
EN 1993-4-2	SS EN 1993-4-2
EN 1993-4-3	SS EN 1993-4-3
EN 1993-5	SS EN 1993-5
EN 1993-6	SS EN 1993-6

2. The comma has been used throughout as a decimal marker in EN 13374, whereas in Singapore Standards it is a practice to use a full-point on the baseline as the decimal marker.

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English Version

Temporary edge protection systems - Product specification - Test methods

Garde-corps périphériques temporaires - Spécification du
produit - Méthodes d'essai

Temporäre Seitenschutzsysteme - Produktfestlegungen -
Prüfverfahren

This European Standard was approved by CEN on 21 March 2013.

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Foreword

This document (EN 13374:2013) has been prepared by Technical Committee CEN/TC 53 “Temporary works equipment”, the secretariat of which is held by DIN.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by November 2013, and conflicting national standards shall be withdrawn at the latest by November 2013.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN [and/or CENELEC] shall not be held responsible for identifying any or all such patent rights.

This document supersedes EN 13374:2004.

Temporary edge protection systems are used in construction work, primarily to prevent persons and objects from falling to a lower level from roofs, edges, stairs and other areas where protection is required.

In most European countries temporary edge protection, or other types of fall protection devices, are required when a risk assessment identifies a fall risk regardless of height. In contrast to being secured by a lanyard, greater mobility in the working area is provided when edge protection is in place. The temporary edge protection can in some situations also act as a handrail for people to hold onto when working or walking close to an edge. COUNCIL DIRECTIVE 92/57/EEC was taken into consideration when reviewing this product standard.

While this standard also includes requirements to protect people from falling objects, e.g. by the provision of toeboards, there could be circumstances where this is insufficient and additional measures, which are beyond the scope of this document, will need to be taken.

Classes specified in this standard are intended to cater for the varied requirements appropriate for different uses.

It is important that the structure to which temporary edge protection is attached can support the load that the system is designed for.

This standard is a revised version of the 2004 version. In general, the following changes have been made:

- the normative references have been updated,
- most of the figures have been updated,
- three tables have been added to clarify design and test requirements,
- all testing related information from Clause 5 and 6 have been moved to Clause 7,
- subclause 5.3 has been simplified,
- subclause 6.1.3 has been added,
- subclause 6.3 has been clarified with table and pictures,
- Clause 7 has been rewritten in most parts,
- Annex A has been deleted, the former Annex B is now Annex A;

— editorial changes and clarifications have been done.

According to the CEN-CENELEC Internal Regulations, the national standards organisations of the following countries are bound to implement this European Standard: Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

1 Scope

This European Standard specifies the requirements and test methods for temporary edge protection systems for use during construction or maintenance of buildings and other structures.

This standard applies to edge protection systems for flat and inclined surfaces and specifies the requirements for three classes of temporary edge protection.

For edge protection systems with an arrest function (e.g. falling or sliding down a sloping roof) this standard specifies requirements for energy absorption.

This standard includes edge protection systems, some of which are fixed to the structure and others, which rely on gravity and friction on flat surfaces.

This standard does not provide requirements for edge protection systems intended for:

- protection against impact from vehicles or from other mobile equipment,
- protection from sliding down of bulk loose materials, snow etc,
- protection of areas accessible to the public.

This standard does not apply to side protection on scaffolds according to EN 12811-1 and EN 1004.

NOTE This does not prevent these systems to be used on temporary structures.

2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

EN 74-1, *Couplers, spigot pins and baseplates for use in falsework and scaffolds — Part 1: Couplers for tubes — Requirements and test procedures*

EN 74-2, *Couplers, spigot pins and baseplates for use in falsework and scaffolds — Part 2: Special couplers — Requirements and test procedures*

EN 74-3, *Couplers, spigot pins and baseplates for use in falsework and scaffolds — Part 3: Plain base plates and spigot pins — Requirements and test procedures*

EN 338, *Structural timber — Strength classes*

EN 596, *Timber structures — Test methods — Soft body impact test of timber framed walls*

EN 1263-1, *Safety nets — Part 1: Safety requirements, test methods*

EN 1990, *Eurocode — Basis of structural design*

EN 1991-1-4, *Eurocode 1: Actions on structures — Part 1-4: General actions — Wind actions*

EN 1993-1-1, *Eurocode 3: Design of steel structures — Part 1-1: General rules and rules for buildings*

EN 1993-1-2, *Eurocode 3: Design of steel structures — Part 1-2: General rules — Structural fire design*

- EN 1993-1-3, *Eurocode 3 — Design of steel structures — Part 1-3: General rules — Supplementary rules for cold-formed members and sheeting*
- EN 1993-1-4, *Eurocode 3 — Design of steel structures — Part 1-4: General rules — Supplementary rules for stainless steels*
- EN 1993-1-5, *Eurocode 3 — Design of steel structures — Part 1-5: Plated structural elements*
- EN 1993-1-6, *Eurocode 3 — Design of steel structures — Part 1-6: Strength and Stability of Shell Structures*
- EN 1993-1-7, *Eurocode 3 — Design of steel structures — Part 1-7: Plated structures subject to out of plane loading*
- EN 1993-1-8, *Eurocode 3: Design of steel structures — Part 1-8: Design of joints*
- EN 1993-1-9, *Eurocode 3: Design of steel structures — Part 1-9: Fatigue*
- EN 1993-1-10, *Eurocode 3: Design of steel structures — Part 1-10: Material toughness and through-thickness properties*
- EN 1993-1-11, *Eurocode 3: Design of steel structures — Part 1-11: Design of structures with tension components*
- EN 1993-1-12, *Eurocode 3: Design of steel structures — Part 1-12: Additional rules for the extension of EN 1993 up to steel grades S 700*
- EN 1993-2, *Eurocode 3: Design of steel structures — Part 2: Steel bridges*
- EN 1993-3-1, *Eurocode 3 - Design of steel structures — Part 3-1: Towers and masts and chimneys- Towers and masts*
- EN 1993-3-2, *Eurocode 3: Design of steel structures — Part 3-2: Towers, masts and chimneys – Chimneys*
- EN 1993-4-1, *Eurocode 3: Design of steel structures — Part 4-1 : Silos*
- EN 1993-4-2, *Eurocode 3: Design of steel structures — Part 4-2: Tanks*
- EN 1993-4-3, *Eurocode 3: Design of steel structures — Part 4-3: Pipelines*
- EN 1993-5, *Eurocode 3: Design of steel structures — Part 5: Piling*
- EN 1993-6, *Eurocode 3: Design of steel structures — Part 6: Crane supporting structures*
- EN 1995-1-1, *Eurocode 5 — Design of timber structures — Part 1-1: General - Common rules and rules for buildings*
- EN 1995-1-2, *Eurocode 5 — Design of timber structures — Part 1-2: General - Structural fire design*
- EN 1995-2, *Eurocode 5: Design of timber structures — Part 2: Bridges*
- EN 1999-1-1, *Eurocode 9 — Design of aluminium structures — Part 1-1: General structural rules*
- EN 1999-1-2, *Eurocode 9 — Design of aluminium structures — Part 1-2: Structural fire design*
- EN 1999-1-3, *Eurocode 9: Design of aluminium structures — Part 1-3: Structures susceptible to fatigue*
- EN 1999-1-4, *Eurocode 9 — Design of aluminium structures — Part 1-4: Cold formed structural sheeting*

EN 1999-1-5, *Eurocode 9 — Design of aluminium structures — Part 1-5: Shell structures*

EN 12811-3:2002, *Temporary works equipment — Part 3: Load testing*