Temporary edge protection systems - Product specification - Test methods



#### EESTI STANDARDI EESSÕNA

#### NATIONAL FOREWORD

See Eesti standard EVS-EN 13374:2013+A1:2018 sisaldab Euroopa standardi EN 13374:2013+A1:2018 ingliskeelset teksti.	This Estonian standard EVS-EN 13374:2013+A1:2018 consists of the English text of the European standard EN 13374:2013+A1:2018.
Standard on jõustunud sellekohase teate avaldamisega EVS Teatajas.	This standard has been endorsed with a notification published in the official bulletin of the Estonian Centre for Standardisation.
Euroopa standardimisorganisatsioonid on teinud Euroopa standardi rahvuslikele liikmetele kättesaadavaks 19.12.2018.	Date of Availability of the European standard is 19.12.2018.
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#### ICS 13.340.99, 91.220

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## EUROPEAN STANDARD

### EN 13374:2013+A1

## NORME EUROPÉENNE EUROPÄISCHE NORM

December 2018

ICS 13.340.99; 91.220

Supersedes EN 13374:2013

#### **English Version**

# Temporary edge protection systems - Product specification - Test methods

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

Temporäre Seitenschutzsysteme -Produktfestlegungen - Prüfverfahren

This European Standard was approved by CEN on 21 March 2013 and includes Amendment 1 approved by CEN on 28 August 2018.

CEN members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration. Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the CEN-CENELEC Management Centre or to any CEN member.

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EUROPEAN COMMITTEE FOR STANDARDIZATION COMITÉ EUROPÉEN DE NORMALISATION EUROPÄISCHES KOMITEE FÜR NORMUNG

CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels

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#### **European foreword**

This document (EN 13374:2013+A1:2018) 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of an identical text or by endorsement, at the latest by June 2019, and conflicting national standards shall be withdrawn at the latest by June 2019.

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

This document includes Amendment 1 approved by CEN on 28 August 2018.

This document supersedes EN 13374:2013.

The start and finish of text introduced or altered by amendment is indicated in the text by tags [A].

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: 5

- 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, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

#### 1 Scope

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

This document 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, Temporary works equipment - 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 throughthickness 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, 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

#### 3 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

#### 3.1

#### edge protection system

set of components intended to protect people from falling to a lower level and to retain materials

Note 1 to entry: see Figure 1.

#### 3.2

#### principal guardrail

rail or continuous element forming the top of the edge protection system

#### 3.3

#### intermediate guardrail

rail or continuous element between the principal guardrail and the working surface

#### 3.4

#### intermediate protection

protection barrier formed (e.g. as a fencing structure or a safety net) between the principal guardrail and the working surface

Note 1 to entry: see Figure 2.

#### 3.5

#### toeboard

upstanding element provided specifically to prevent materials or persons from falling or sliding off a surface

#### 3.6

#### post

principal vertical support of the edge protection system to which the guardrails and toeboards are attached