

**Mobile access and working towers
made of prefabricated elements -
Materials, dimensions, design loads,
safety and performance requirements**

Mobile access and working towers made of
prefabricated elements - Materials, dimensions,
design loads, safety and performance requirements

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

<p>Käesolev Eesti standard EVS-EN 1004:2005 sisaldab Euroopa standardi EN 1004:2004 ingliskeelset teksti.</p> <p>Käesolev dokument on jõustatud 22.02.2005 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes.</p> <p>Standard on kättesaadav Eesti standardiorganisatsioonist.</p>	<p>This Estonian standard EVS-EN 1004:2005 consists of the English text of the European standard EN 1004:2004.</p> <p>This document is endorsed on 22.02.2005 with the notification being published in the official publication of the Estonian national standardisation organisation.</p> <p>The standard is available from Estonian standardisation organisation.</p>
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<p>Käsitlusala:</p> <p>This document applies to the design of mobile access and working towers made of prefabricated elements with a height from 2,5 m to 12,0 m (indoors) and from 2,5 m to 8,0 m (outdoors).</p>	<p>Scope:</p> <p>This document applies to the design of mobile access and working towers made of prefabricated elements with a height from 2,5 m to 12,0 m (indoors) and from 2,5 m to 8,0 m (outdoors).</p>
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Võtmesõnad: force, measurement, production, safety, safety engineering, safety requirements, scaffolding, scaffolds, site equipment, specification (approval), specifications, stability, staging, structural design, structures, testing, transportable, working platforms

Hinnagrupp P

English version

**Mobile access and working towers made of prefabricated
elements - Materials, dimensions, design loads, safety and
performance requirements**

Échafaudages roulants de service en éléments
préfabriqués - Matériaux, dimensions, charges de calcul et
exigences de sécurité

Fahrbare Arbeitsbühnen aus vorgefertigten Bauteilen -
Werkstoffe, Maße, Lastannahmen und
sicherheitstechnische Anforderungen

This European Standard was approved by CEN on 12 November 2004.

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 Central Secretariat or to any CEN member.

This European Standard exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CEN member into its own language and notified to the Central Secretariat has the same status as the official versions.

CEN members are the national standards bodies of Austria, Belgium, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Slovakia, Slovenia, Spain, Sweden, Switzerland and United Kingdom.



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Foreword

This document (EN 1004:2004) 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 2005, and conflicting national standards shall be withdrawn at the latest by June 2005.

This document supersedes HD 1004:1992.

The development of mobile access and working towers system is from two roots:

- scaffold manufacturers placed prefabricated unanchored scaffolds on four legs and castors and
- ladder manufacturers began to construct mobile access towers with light-weight ladders using aluminium frames and castors.

Taking this into account, CEN/TC53 decided in 1980 to standardize the manufacture of mobile access and working towers in parallel with the European standardization of prefabricated service and working scaffolds EN 12810-2 and EN 12811-3.

For materials, this document refers only to valid documents. However, a large stock of equipment made of materials conforming to documents no longer valid is in use. This document does not cover this equipment.

During discussion of the draft it was noted that the average height of people is increasing and that consideration will have to be given in later editions to altering vertical dimensions.

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

1 Scope

This document applies to the design of mobile access and working towers made of prefabricated elements with a height from 2,5 m to 12,0 m (indoors) and from 2,5 m to 8,0 m (outdoors).

This document:

- gives guidelines for the choice of the main dimensions and stabilizing methods;
- gives safety and performance requirements; and
- gives some information on complete towers.

NOTE In this document "indoors" means that the towers is not be exposed to wind, and "outdoors" means that the towers may be exposed to wind.

2 Normative references

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

EN 74, *Couplers, loose spigots and base-plates for use in working scaffolds and falsework made of steel tubes – Requirements and test procedures*

EN 1298, *Mobile access and working towers – Rules and guidelines for the preparation of an instruction manual*

EN 1991-2-4, *Eurocode 1: Basis of design and actions on structures- Part 2-4: Actions on structures - Wind actions*

EN 1993-1-1:2005, *Eurocode 3: Design of steel structures – Part 1-1: General rules and rules for buildings*

EN 1995-1-1, *Eurocode 5 : Design of timber structures – Part 1-1 : General rules and rules for building*

EN 1999-1-1, *Eurocode 9: Design of aluminium structures – Part 1-1: General rules - General rules and rules for buildings*

EN 12810-2, *Façade scaffolds made of prefabricated components – Part 2: Particular methods of structural design*

EN 12811-2, *Temporary works equipment – Part 2: Information on materials.*

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