

Temporary works equipment - Load bearing towers of prefabricated components - Particular methods of structural design

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EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

<p>Käesolev Eesti standard EVS-EN 12813:2004 sisaldab Euroopa standardi EN 12813:2004 ingliskeelset teksti.</p> <p>Käesolev dokument on jõustatud 23.09.2004 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes.</p> <p>Standard on kättesaadav Eesti standardiorganisatsioonist.</p>	<p>This Estonian standard EVS-EN 12813:2004 consists of the English text of the European standard EN 12813:2004.</p> <p>This document is endorsed on 23.09.2004 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 European Standard describes methods for establishing structural data for stiffness and resistance by calculation supported by tests for load bearing towers made of prefabricated components of steel or aluminium alloy. The vertical load capacity is established, both with or without horizontal loads and with the top restrained or free.</p>	<p>Scope:</p> <p>This European Standard describes methods for establishing structural data for stiffness and resistance by calculation supported by tests for load bearing towers made of prefabricated components of steel or aluminium alloy. The vertical load capacity is established, both with or without horizontal loads and with the top restrained or free.</p>
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ICS 91.220

Võtmesõnad:

ICS 91.220

English version

**Temporary works equipment - Load bearing towers of
prefabricated components - Particular methods of structural
design**

Equipements temporaires de chantiers - Tours d'étalement
en composants préfabriqués - Méthodes particulières de
calcul des structures

Temporäre Konstruktionen für Bauwerke - Stützentürme
aus vorgefertigten Bauteilen - Besondere
Bemessungsverfahren

This European Standard was approved by CEN on 4 December 2003.

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 12813:2004) has been prepared by Technical Committee CEN/TC 053 "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 December 2004, and conflicting national standards shall be withdrawn at the latest by December 2004.

Annex A is informative, annex B is normative.

This document includes a bibliography.

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.

Introduction

This European Standard is intended to provide information for those who specify load bearing towers made from prefabricated components and for the designer who has to prepare a scheme for their use.

This European Standard will be of interest to those who wish to develop particular items, or groups of items for load bearing towers of prefabricated components.

This European Standard describes how to establish structural data for load bearing towers made from prefabricated components.

Most of the figures illustrating the standard are of a particular type of tower but the procedures described are applicable to all towers.

There is a requirement for a global test to demonstrate that the modelling adopted in the analysis is sufficiently accurate and on the conservative side.

For materials this standard refers only to valid European Standards. However a large stock of equipment made of materials conforming to standards no longer valid is in use. This standard does not cover the use of this equipment.

NOTE This European Standard does not give information on site activities nor about safety requirements, for which reference should be made to E.C. directives, and national documents.

1 Scope

This European Standard describes methods for establishing structural data for stiffness and resistance by calculation supported by tests for load bearing towers made of prefabricated components of steel or aluminium alloy. The vertical load capacity is established, both with or without horizontal loads and with the top restrained or free.

This European Standard specifies two methods of analysis, by first order theory, or by second order theory.

NOTE For definitions and requirements relating to structures and materials of the structure, specifications and loads, see EN 12812.

The European Standard is not intended for towers constructed with tubes and couplers: it is expected that they will be designed in accordance with EN 12812.

2 Normative references

This European Standard incorporates by dated or undated reference, provisions from other publications. These normative references are cited at the appropriate places in the text and the publications are listed hereafter. For dated references, subsequent amendments to or revisions of any of these publications apply to this European Standard only when incorporated in it by amendment or revision. For undated references the latest edition of the publication referred to applies (including amendments).

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

ENV 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 12811-3:2002, *Temporary works equipment - Part 3: Load testing*.

EN 12812:2004, *Falsework — Performance requirements and general design*.

3 Terms and definitions

For the purposes of this European Standard, the terms and definitions of EN 12812 and the following apply.

3.1

base plate

plate used for spreading the load in a standard over a greater area

3.2

base jack

base plate which has means of vertical adjustment

NOTE It is intended to be positioned at the base of an upright. It usually incorporates a base plate.