# Temporary works equipment - Scaffolds - Part 2: Information on materials

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# **EESTI STANDARDI EESSÕNA**

# **NATIONAL FOREWORD**

Käesolev Eesti standard EVS-EN 12811-2:2004 sisaldab Euroopa standardi EN 12811-2:2004 ingliskeelset teksti.

Käesolev dokument on jõustatud 18.05.2004 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes.

Standard on kättesaadav Eesti standardiorganisatsioonist.

This Estonian standard EVS-EN 12811-2:2004 consists of the English text of the European standard EN 12811-2:2004.

This document is endorsed on 18.05.2004 with the notification being published in the official publication of the Estonian national standardisation organisation.

The standard is available from Estonian standardisation organisation.

#### Käsitlusala:

This European Standard provides guidance on where to find information on materials often used in temporary works. It draws attention to a number of points that a designer should take into account. The information given is limited to commonly used steel, aluminium alloys, cast iron, timber and timber based materials.

#### Scope:

This European Standard provides guidance on where to find information on materials often used in temporary works. It draws attention to a number of points that a designer should take into account. The information given is limited to commonly used steel, aluminium alloys, cast iron, timber and timber based materials.

ICS 91.220

**Võtmesõnad:** materia, materials specification, occupational safety, scaffolding, scaffolds, slung scaffolds, specification (approval), specifications, steel alloy, test performance, testing, timber, woodbased sheet materials, wooden boards, work scaffoldings, workplace safety

# EUROPEAN STANDARD NORME EUROPÉENNE

**EUROPÄISCHE NORM** 

EN 12811-2

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#### **English version**

# Temporary works equipment - Part 2: Information on materials

Equipements temporaires de chantiers - Partie 2: Information concernant les matériaux

Temporäre Konstruktionen für Bauwerke - Teil 2: Informationen zu den Werkstoffen

This European Standard was approved by CEN on 17 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 Management Centre 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 Management Centre 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.



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

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# **Foreword**

This document (EN 12811-2:2004) has been prepared by Technical Committee CEN/TC 53 "Temporäre Baukonstruktionen", 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 August 2004, and conflicting national standards shall be withdrawn at the latest by August 2004.

This European Standard EN 12811 consists of the following parts under the general title: Temporary works equipment:

- Part 1: Scaffolds Performance requirements and general design
- Part 2: Information on materials
- Part 3: Load testing

Annex A is informative.

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 represents a supporting standard for product standards produced by CEN/TC 53.

It takes into account the material-related comments on the following drafts obtained in the CEN-enquiry:

prEN 12810-1:1997, Facade scaffolds made of prefabricated components — Part 1: Product specifications.

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

prEN 12811:1997, Scaffolds — Performance requirements and general design.

prEN 12812:1997, Falsework — Performance requirements and general design.

prEN 12813:1997, Load bearing towers made of prefabricated elements — Methods of particular design and assessment.

prEN 13331-1:1998, Trench lining systems — Part 1: Product specifications.

prEN 13331-2:1998, Trench lining systems — Part 2: Assessment by calculation or test.

prEN 13377:1998, Prefabricated timber formwork beams — Requirements, classification and assessment.

This standard is limited to the selection of types and grades of material from standards, which are either international or European standards. However, in the field of temporary works equipment the use of other materials can be indicated or even imperative.

The use of non standardised (new) materials can give advantage for particular components. But this use prevents the marking of the product conforming in other respects to the product standard with the number of the respective product standard.

The components of temporary works equipment are used for many years. There are components in the stores of the users and on building sites which are made of materials corresponding to former national standards.

This standard does not intend to prevent neither the use of non standardised (new) materials nor the use of components made of old materials.

It is beyond the scope and the competence of CEN/TC 53 to formulate regulations for non standardized new materials and for old materials former standardized nationally.

In the absence of a European product directive for temporary works equipment, such regulations and their mutual acknowledgement are reserved to the single European country.

For closing the gap until a European regulation is available, the following recommendations are given:

- 1. The single country could add a national foreword to this standard, which regulates the further use of components, made of old materials for its jurisdiction.
- 2. The Working Groups of CEN/TC 53 could include a requirement in their product standards that also products made partially of materials not covered by ISO or EN standards may have the number of the product standard, if they are marked with an asterisk additionally and if the fact is recorded in the product manual.

### 1 Scope

This European Standard provides guidance on where to find information on materials often used in temporary works. It draws attention to a number of points that a designer should take into account.

The information given is limited to commonly used steel, aluminium alloys, cast iron, timber and timber based materials.

Requirements are also given for welding, for limiting corrosion and other deterioration.

It is limited to the selection of types and grades of material from standards, which are either international or European Standards.

#### 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).

EN 301, Adhesives, phenolic and aminoplastic, for load-bearing timber structures - Classification and performance requirements.

EN 336, Structural timber — Sizes, permitted deviations.

EN 338, Structural timber — Strength classes.

EN 390, Glued laminated timber — Sizes — Permissible deviations.

EN 729-1, Quality requirements for welding — Fusion welding of metallic materials — Part 1: Guidelines for selection and use.

EN 1562, Founding — Malleable cast irons.

EN 1563, Founding — Spheroidal graphite cast irons.

EN 10142, Continuously hot-dip zinc coated low carbon steels strip and sheet for cold forming — Technical delivery conditions.

EN 10204, Metallic products — Types of inspection documents.

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

ENV 1993-1-3, Eurocode 3: Design of steel structures — Part 1-3: General rules - Supplementary rules for cold formed thin gauge members and sheeting.

ENV 1995-1-1, Eurocode 5: Design of timber structures — Part 1-1: General rules and rules for buildings.

ENV 1999-1-1:1998, Eurocode 9: Design of aluminium structures — Part 1-1: General rules - General rules and rules for buildings.

EN ISO 1461; Hot dip galvanized coatings on fabricated iron and steel articles - Specifications and test methods (ISO 1461:1999).

EN ISO 12944 – Parts 1 to 8, Paints and varnishes — Corrosion protection of steel structures by protective paint systems.