

## საქართველოს სტანდარტი

---

სსკ: 91.220

დროებითი სამუშაოების მოწყობილობა-ნაწილი 3: გამოცდა დატვირთვაზე

საინფორმაციო ნაწილი. სრული ტექსტის სანახავად შეიძინეთ სტანდარტი.

სსტ ენ 12811-3:2002/2021

## საინფორმაციო მონაცემები

1 მიღებულია და დაშვებულია სამოქმედოდ: სსიპ-საქართველოს სტანდარტებისა და მეტროლოგიის ეროვნული სააგენტოს გენერალური დირექტორის 20/07/2021 წლის № 45 განკარგულებით

2 მიღებულია „თავფურცლის“ თარგმნის მეთოდით: სტანდარტიზაციის ევროპული კომიტეტის (სენ) სტანდარტის ენ 12811-3:2002 „ დროებითი სამუშაოების მოწყობილობა-ნაწილი 3: გამოცდა დატვირთვაზე”

3 პირველად

4 რეგისტრირებულია: სსიპ-საქართველოს სტანდარტებისა და მეტროლოგიის ეროვნული სააგენტოს რეესტრში: 20/07/2021 წლის №268-1.3-020917

წინამდებარე სტანდარტის ნებისმიერი ფორმით გავრცელება სააგენტოს ნებართვის გარეშე აკრძალულია

ICS 91.220

English version

## Temporary works equipment - Part 3: Load testing

Equipements temporaires de chantiers - Partie 3: Essais  
de charges

Temporäre Konstruktionen für Bauwerke - Teil 3: Versuche  
zum Tragverhalten

This European Standard was approved by CEN on 14 September 2002.

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, Czech Republic, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Malta, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and United Kingdom.



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

Management Centre: rue de Stassart, 36 B-1050 Brussels

საინფორმაციო ნაწილი. სრული ტექსტის სახანაგად შეიძინეთ სტანდარტი.

## Contents

	page
Foreword.....	4
<b>1 Scope .....</b>	<b>5</b>
<b>2 Normative references .....</b>	<b>5</b>
<b>3 Terms and definitions.....</b>	<b>5</b>
<b>4 Typical test procedures.....</b>	<b>6</b>
4.1 Basis.....	6
4.2 Types of tests.....	6
<b>5 General requirements for load testing.....</b>	<b>7</b>
<b>6 Testing of materials .....</b>	<b>8</b>
6.1 General.....	8
6.2 Sampling.....	8
6.3 Test methods.....	9
6.3.1 Metallic materials.....	9
6.3.2 Wood based materials.....	9
<b>7 Testing of configurations and components.....</b>	<b>9</b>
7.1 General.....	9
7.2 Tests to determine load bearing capacity, stiffness and looseness.....	9
7.2.1 General.....	9
7.2.2 Cyclic loading.....	9
7.3 Repeated loading.....	10
7.4 Vibration tests.....	10
7.5 Impact tests.....	11
<b>8 Testing of system configurations .....</b>	<b>11</b>
<b>9 Documentation of test results .....</b>	<b>12</b>
9.1 General.....	12
9.2 Content of test report.....	12
9.3 Detailed instructions to the content.....	12
9.3.1 Title page.....	12
9.3.2 Preliminary remarks.....	13
9.3.3 The tested items.....	13
9.3.4 Test programme.....	13
9.3.5 Test arrangement and procedure.....	13
9.3.6 Results.....	14
<b>10 Evaluation of load bearing capacity, stiffness from testing metallic configurations and components.....</b>	<b>14</b>
10.1 General.....	14
10.2 Approximation functions.....	14
10.3 Dissipation of energy.....	16
10.4 The ultimate value of the resistance $r_{u,i}^a$ .....	17
10.5 The partial safety factor $\gamma_{R2}$ depending on the ductility.....	18
10.6 Adjustment of the ultimate values $r_{u,i}^a$ to $r_{u,i}^b$ depending on deviations of the dimensions of the cross section.....	18
10.7 Adjustment of the ultimate values $r_{u,i}^b$ to $r_{u,i}^c$ depending on the material properties.....	18
10.8 Statistical determination of the basic characteristic value of the resistance $R_{k,b}$ .....	20

10.9	Determination of the nominal characteristic value of the resistance $R_{k,nom}$ .....	21
10.10	Evaluation of looseness, stiffness.....	21
<b>Annex A (informative) Example for the determination of an approximation function, of the quotient <math>q_e</math> for the dissipation of energy and of the partial safety factor <math>\gamma_{R2}</math>.....</b>		
A.1	Basis.....	25
A.2	Approximation functions .....	26
A.3	Dissipation of energy .....	28
A.4	Partial safety factor $\gamma_{R2}$ .....	29
<b>Annex B (informative) Example for the statistical evaluation of test results and determination of the nominal characteristic value of the resistance.....</b>		
B.1	Basis.....	30
B.2	Calculations.....	30
<b>Annex C (informative) Example for the evaluation of stiffness.....</b>		
C.1	Basis.....	32
C.2	Comparison of the averaged stiffnesses in positive $\bar{c}_{pp}$ and negative $\bar{c}_{mm}$ load.....	32
C.3	Resulting stiffness.....	33
<b>Bibliography .....</b>		<b>35</b>

## Foreword

This document (EN 12811-3:2002) 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 May 2003, and conflicting national standards shall be withdrawn at the latest by May 2003.

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

Part 1: Performance requirements and general design

Part 2: Information on materials

Part 3: Load testing

Annexes A to C are 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, Czech Republic, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Malta, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and the United Kingdom.

საინფორმაციო ნაწილი. სრული ტექსტის სახსრავად შეიძინეთ სტანდარტი.