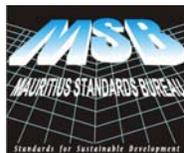

**Temporary works equipment –
Part 1: Scaffolds - Performance
requirements and general design**

ICS 91.220



**Mauritius Standards Bureau
Moka**

Gr 17

This national standard is the identical implementation of EN 12811-1:2003 and is adopted with the permission of CEN, Avenue Marnix 17, B-1000 Brussels, Belgium.

National foreword

This Mauritian Standard is identical with the European Standard **EN 12811-1:2003**, *Temporary works equipment – Part 1: Scaffolds – Performance requirements and general design*. It was adopted by the Mauritius Standards Bureau in 2013 on the recommendation of the **Building and Construction Standards Committee** and approval of the **Standards Council** on 28 March 2013. It was notified in the Government Gazette on **13 April 2013***.

For the purposes of this standard the following changes should be made:

- (i) the words 'European Standard' should be read as 'Mauritian Standard',
- (ii) 'decimal comma' should be replaced by 'decimal point'.
- (iii) Clause 5.7.4 – to insert the following statement as a note:
 - *the overlap length may be reduced further as specified by the manufacturer*

- (iv) Clause 5.8 – to insert the following statement as Note 3:

Note 3: Steel ladders may be used vertically provided they are continuous and designed specifically for use with the type of equipment on which it is fitted.

- (v) Clause 5.8.3 – to insert the following statement as a note
 - *other suitable means may be used to prevent persons from falling through the openings*
- (vi) To delete clause 6.2.6 on snow and ice loads.

* **General Notice No. 1000 of 2013.**



COPYRIGHT PROTECTED DOCUMENT

© MSB 2013

All rights reserved. Unless otherwise specified, no part of this publication may be reproduced or utilized in any form or by any means, electronic or mechanical, including photocopying and microfilm, or posting on the internet or an intranet without permission in writing from Mauritius Standards Bureau at the address below

*Mauritius Standards Bureau
Villa Road
Moka
Mauritius*

Telephone + (230) 433 3648
Fax + (230) 433 5051/ 433 5150
E-mail msb@intnet.mu
Website <http://msb.intnet.mu>

ICS 91.220

English version

Temporary works equipment - Part 1: Scaffolds - Performance requirements and general design

Equipements temporaires de chantiers - Partie 1:
Echafaudages - Exigences de performance et étude, en
général

Temporäre Konstruktionen für Bauwerke - Teil 1:
Arbeitsgerüste - Leistungsanforderungen, Entwurf,
Konstruktion und Bemessung

This European Standard was approved by CEN on 4 September 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, Czech Republic, Denmark, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Luxembourg, Malta, Netherlands, Norway, Portugal, Slovakia, 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

Contents

	Page
Introduction	4
1 Scope	5
2 Normative references	5
3 Terms and definitions.....	6
4 Materials.....	10
5 General requirements.....	11
6 Requirements for structural design.....	17
7 Product manual.....	26
8 Instruction manual.....	26
9 Work on site.....	27
10 Structural design	27
Annex A (informative) Wind loads on clad working scaffolds.....	35
Annex B (normative) Base jacks; data for calculation	37
Annex C (normative) Characteristic values of the resistances for couplers	41
Annex D (Informative) National A-deviations	44
Bibliography	45

PREVIEW

Foreword

This document (EN 12811-1:2003) 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 2004, and conflicting national standards shall be withdrawn at the latest by June 2004.

This European Standard is one of the package of standards listed below:

- EN 12810-1, Façade scaffolds made of prefabricated components - Part 1: Product specifications
- EN 12810-2, Façade scaffolds made of prefabricated components- Part 2: Particular methods of structural design
- EN 12811-1, Temporary works equipment – Part 1:– Scaffolds – Performance requirements and general design
- prEN 12811-2, Temporary works equipment.– Part 2: Information on materials
- EN 12811-3, Temporary works equipment – Part 3: Load testing

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

Introduction

The purpose of a working scaffold is to provide a safe place of work with safe access suitable for the work being done. This European Standard sets out performance requirements for working scaffolds. These are substantially independent of the materials of which the scaffold is made. The standard is intended to be used as the basis for enquiry and design.

As a number of options are given to suit different applications, a choice has to be made between the various alternatives within this European Standard. All other requirements could be in an associated job specification.

Based on these requirements, a set of rules can be drawn up for a particular type of equipment. These may be standard for general use, or specially prepared for a particular job.

This European Standard includes rules for structural design, which are of particular relevance to scaffolds made of certain materials.

For materials this standard refers only to valid EN 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.

Because the dimensions of the working scaffold depend on the type of work and the method of execution, the corresponding national legal rules should be taken into account.

PREVIEW

1 Scope

This European Standard specifies performance requirements and methods of structural and general design for access and working scaffolds, referred to from hereon as working scaffolds. Requirements given are for scaffold structures, which rely on the adjacent structures for stability. In general these requirements also apply to other types of working scaffolds. Normal requirements are set down, but there is also provision for special cases.

This European Standard also specifies structural design rules when certain materials are used and general rules for prefabricated equipment.

The standard excludes:

- platforms suspended by ropes, whether fixed or movable;
- horizontally movable platforms including Mobile Access Towers (MAT);
- power-operated platforms;
- scaffolds used as protection for roof work;
- temporary roofs.

NOTE 1 Most working scaffolds are formed from prefabricated components or from tubes and couplers. Some examples of working scaffolds are façade scaffolds, static towers and birdcage scaffolds, but details are not given for all of these.

NOTE 2 Falsework and shoring may be made of the structural components described in this standard, but are not working scaffolds.

NOTE 3 Particular requirements for façade scaffolds made of prefabricated components are specified in EN 12810 -1 and EN 12810-2.

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 apply (including amendments).

EN 74: 1988, *Couplers, loose spigots and base-plates for use in working scaffolds and falsework made of steel tubes – Requirements and test procedures.*

prEN 74-1, *Couplers, spigots and baseplates for use in falsework and scaffolds – Part 1: Couplers for tubes – Requirements and test methods.*

EN 338, *Structural timber – Strength classes.*

EN 12810-1:2003, *Façade scaffolds made of prefabricated elements – Part 1: Product specifications.*

EN 12810-2, *Façade scaffolds made of prefabricated elements – Part 2: Methods of particular design and assessment.*

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

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

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

ENV 1990, *Eurocode 1: Basis of structural design.*