



SLOVENSKI STANDARD
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Premična delovna ploščad z majhno višino - Materiali, mere, konstrukcijske obremenitve, varnostne in izvedbene zahteve

Low height mobile working platform - Materials, dimensions, design loads, safety and performance requirements

Kleine fahrbare Arbeitsbühnen - Werkstoffe, Maße, Lastannahmen und sicherheitstechnische Anforderungen

Plateforme de travail mobile de faible hauteur - Matériaux, dimensions, charges de calcul, exigences de sécurité et de performance

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Low height mobile working platform - Materials, dimensions, design loads, safety and performance requirements

Kleine fahrbare Arbeitsbühnen

This draft European Standard is submitted to CEN members for enquiry. It has been drawn up by the Technical Committee CEN/TC 53.

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prEN 17964:2023 (E)

European foreword

This document (prEN 17964:2023) has been prepared by Technical Committee CEN/TC 53, Temporary works equipment, the secretariat of which is held by DIN.

This document is currently submitted to the CEN Enquiry.

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Introduction

Low height mobile working platforms with platform heights limited by design up to 2,0 m are common on the market. Special requirements for these products are specified in this document.

The need for this document has arisen because for mobile access towers with heights from 2,50 m to 12 m were standardized in EN 1004:2004, and with the version of EN 1004-1:2020 the minimum height was extended to 0 m. With this extension to 0 m, low height mobile working platforms would fall under the scope of EN 1004-1. For these structures, different load assumptions and verification methods are appropriate.

Attention is drawn to the requirements of the European Council Directive 2001/45/EC (the Temporary Work at Height Directive).

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prEN 17964:2023 (E)**1 Scope**

This document applies to the design of low height mobile working platforms:

- with wheels;
- for assembly and use by one person;
- with no more than one platform level;
- made of prefabricated elements with dimensions which are fixed by the design;
- with a platform height limited by the design up to 2,0 m;
- used indoors or outdoors.

Low height mobile working platforms are suitable for use where the equivalent dynamic pressure including gusts is less than 0,1 kN/m².

This document:

- gives dimensional requirements;
- safety and performance requirements.

This document does not apply to:

- scaffolds according to EN 12810-1 and EN 12811-1;
- mobile access towers according to EN 1004-1;
- mobile ladders with platform according to EN 131-7;
- ladders with separate platform according to EN 131-8.

where different load assumptions and verification methods are applied.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements 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 1004-1:2020, *Mobile access and working towers made of prefabricated elements - Part 1: Materials, dimensions, design loads, safety and performance requirements*

EN 131-7:2013, *Ladders - Part 7: Mobile ladders with platform*

EN 12532, *Castors and wheels - Castors and wheels for applications up to 1,1 m/s (4 km/h)*

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

EN ISO 2081, *Metallic and other inorganic coatings - Electroplated coatings of zinc with supplementary treatments on iron or steel (ISO 2081)*

EN ISO 7010, *Graphical symbols - Safety colours and safety signs - Registered safety signs (ISO 7010)*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in EN 1004-1:2020 and the following terms and definitions apply.

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

- ISO Online browsing platform: available at <http://www.iso.org/obp>
- IEC Electropedia: available at <http://www.electropedia.org/>

3.1

low height mobile working platforms

LHMWP

free-standing mobile product for temporary work at height for use by one person, consisting of prefabricated components which fix the dimensions of the design, and comprising of a single bay and one platform with a maximum height of 2 m

3.2

rung

horizontal member of the vertical end frame which supports the platform

3.3

wheel

device to facilitate the movement of the low height mobile working platform

Note 1 to entry: Wheels can be:

- used for transportation;
- used for transportation and as load-bearing components;
- fitted with brakes.

3.4

end frame

structural component positioned at the ends of the low height mobile working platform, and which can also provide a means of access and / or side protection

3.5

instruction manual

document containing information for the use of a product

3.6

supplier

individual or organization that provides products and related documentation

3.7

application

task for which the low height mobile working platform was assembled

3.8

use

application, assembly, alteration, moving, dismantling, inspection, care and maintenance

prEN 17964:2023 (E)**3.9****alteration**

changing from one permitted configuration to another

3.10**user**

every person carrying out any activities as defined in 3.8

4 Classification

The applicable loads and dimensional classes are given in Table 1.

Table 1 — Classification

Class	Maximum total load	Test load	Minimum platform length	Maximum platform length	Minimum platform width	Maximum platform width
A	1,5 kN	3,5 kN	0,8 m	2,0 m	0,45 m	1,0 m
B	1,5 kN uniformly distributed load, (minimum 1,5 kN total load)	1,5 kN/m ² x the area of the platform x 1,65 ^a (minimum 3,5 kN)	1,0 m	3,5 m	0,6 m	2,0 m

5 Designation

The following data are required for the designation of all low height mobile working platforms:

- a) product name (name given by the manufacture/supplier);
- b) number of the standard;
- c) class;
- d) maximum height of the platform;
- e) access type.

An example of a designation is given in Figure 1.

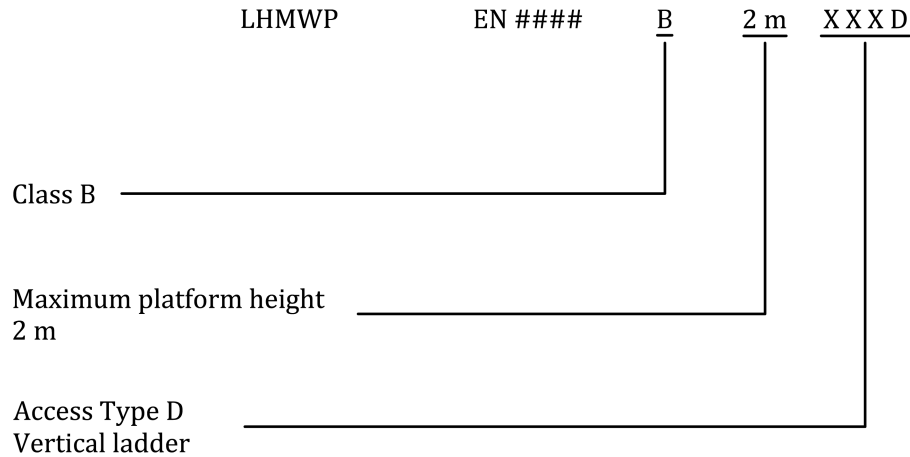


Figure 1 — Example designation

6 Materials

The following requirements apply to materials:

- 1) Materials shall fulfil the requirements given in European Standards, where design data are provided. If European Standards do not exist, ISO Standards can be applied.
- 2) Materials shall be sufficiently robust and durable to withstand normal working conditions.
- 3) Additional requirements for some materials are given in EN 12811-2.
- 4) When materials are used, whose properties in relation to the intended application (e.g. temperature, ageing, UV-degradation) are not given in any available standard an adequate assessment is required.
- 5) Steel shall be protected by one of the methods given in EN 12811-2, or zinc plated to the level required for the design service environment stated in EN ISO 2081.

7 General requirements

The following general requirements apply:

- 1) A low height mobile working platform shall have a maximum platform height of 2 m.
- 2) A low height mobile working platform shall only consist of a single bay structure.
- 3) A low height mobile working platform shall be designed such that it can be assembled, altered and dismantled without the need for personal fall protection equipment.
- 4) A low height mobile working platform shall be designed such that it can be assembled and dismantled by one person.
- 5) Screws and nuts shall be secured against loosening, e.g. by means of self-locking or mechanically locked safety devices.
- 6) Low height mobile working platforms with vertically telescopic end frames shall also comply with the requirements of Annex A.

8 Requirements for access to the platform

8.1 Introduction

The class and dimensions for access to the platform for low height mobile working platforms shall comply with EN 1004-1.

8.2 General access requirements

The following general access requirements apply:

- 1) Access for low height mobile working platforms shall comply with the verification tests in Clause 12 and Annex A where applicable.
- 2) Access for low height mobile working platforms shall be provided by a component of the low height mobile working platform.
- 3) Access, other than the upright elements of the end frames, of low height mobile working platform shall not rest on the ground.
- 4) Access openings in platforms through which the user will climb shall have a minimum clear opening of 0,40 m wide × 0,60 m long.
- 5) Type A stairway and Type B stair ladder access shall be provided with handrails in accordance with EN 131-7:2013, 5.7.

8.3 Methods of access to the platform

The methods of access to the platform shall be as follows:

- 1) Access through the trapdoor by climbing from the inside of the LHMWP through the trapdoor to access the platform where the height of the platform is greater than 0,9 m.
- 2) Access to the platform by climbing from the outside of the structural supports. An additional stability test is required, see 12.5.1.
- 3) Access to the platform by sitting on the platform. This is only allowed for platform heights ≤ 0,90 m.