

Code of practice for the installation, maintenance, thorough examination and safe use of mast climbing work platforms (MCWPs)

ICS 53.020.99

Committees responsible for this British Standard

The preparation of this British Standard was entrusted by Technical Committee MHE/12, Lifting platforms to panel MHE/12/-/2, Mast climbing work platforms, upon which the following bodies were represented:

- Construction Plant Hire Association
- Health and Safety Executive
- International Powered Access Federation
- Co-opted members

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Foreword

This British Standard has been prepared by Technical Committee MHE/12 as a result of requests from industry. It has been based on proposals from the International Powered Access Federation using their Health and Safety Guidance for Mast Climbing Work Platforms and BS EN 1495, *Lifting platforms — Mast climbing work platforms*.

Mast climbing work platforms (MCWPs) are increasingly being used as temporary working places giving variable height access to specific areas above ground level. In many cases they are more convenient to use than other forms of access equipment such as ladders, scaffolding, staging, or suspended cradles. Examples of MCWPs are shown in Figure 1, Figure 2 and Figure 3.

This standard sets out various guidance and recommendations to ensure that MCWPs are installed, maintained, examined and used in a safe manner.

The Health and Safety Executive (HSE) commend the use of this Code of practice to those who have duties under the Health and Safety at Work etc. Act 1974 and other relevant health and safety legislation. This code was drawn up with the participation of HSE representatives and will be included in the list of “standards significant to health and safety at work” available from The Stationery Office.

As a Code of practice, this British Standard takes the form of guidance and recommendations. It should not be quoted as if it were a specification and particular care should be taken to ensure that claims of compliance are not misleading.

Annex A and Annex B are informative.

This British Standard does not purport to include all necessary provisions of a contract. Users of British Standards are responsible for their correct application.

Attention is drawn to the Lifting Operations and Lifting Equipment Regulations 1998 (LOLER).

Compliance with this Code of practice does not of itself confer immunity from legal obligations.

Summary of pages

This document comprises a front cover, an inside front cover, pages i and ii, pages 1 to 25 and a back cover.

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1 Scope

This British Standard provides guidance and recommendations for persons responsible for the installation, maintenance and thorough examination of mast climbing work platforms (MCWPs). It also provides guidance and recommendations on the safe use of MCWPs.

This British Standard gives recommendations for MCWPs, which are temporarily and permanently installed, electrically powered and designed to be used by one or more persons from which to carry out work. The vertical moving components (work platform) are used to move those same persons and their equipment and materials to and from a single boarding point. These restrictions differentiate MCWPs from builder's hoists.

This British Standard gives recommendations for MCWPs including those that meet the requirements of BS EN 1495. These MCWPs typically can be considered to consist of four assemblies, or groups of parts, as follows.

- a) At least one mast which is climbed by and which supports the work platform.
- b) A work platform capable of supporting persons, equipment, tools and materials, etc.
- c) A wheeled chassis or a base frame supporting the mast structure.

NOTE 1 The chassis or base frame can provide stability for MCWPs up to a predetermined free-standing height, above which the mast(s) is tied to the building or other structure.

- d) Mast tie assemblies.

NOTE 2 Figure 1 shows a single-mast mobile MCWP. Figure 2 shows a twin mast MCWP that for illustrative purposes shows examples of a fixed base and a mobile base. Twin mast machines on site either have two fixed bases or two mobile chassis'. Figure 3 shows typical mast tie arrangements.

This British Standard does not give recommendations for dealing with the hazards involved in the manoeuvring, erection or dismantling, fixing or removing of any materials or equipment which are not part of the mast climbing work platform. Neither does it deal with the handling of specific hazardous materials.

This British Standard does not give recommendations for delivering persons and materials to fixed landing levels. Such equipment referred to as lifts or hoists are dealt with by other standards including BS EN 12158-1, *Builder's hoists for goods*, BS EN 12159, *Builder's hoists for goods and passengers* and BS EN 81, *Safety rules for the construction and installation of lifts*.

Mobile Elevating Work Platforms (MEWPs) conforming to BS 7171, suspended access equipment defined in accordance with BS EN 1808 and lifting tables defined in accordance with BS EN 1570 are not included within the scope of this Code of practice.

2 Normative references

The following normative document contains provisions which, through reference in this text, constitute provisions of this British Standard. For dated references, subsequent amendments to, or revisions of, any of these publications do not apply. For undated references, the latest edition of the publication referred to applies.

BS EN 1495, *Lifting platforms — Mast climbing work platforms*.

3 Terms and definitions

For the purposes of this standard the following terms and definitions apply.

3.1

rated load

load for which an MCWP has been designed for in normal operation as stated in the load diagram/chart

3.2

rated speed

vertical or horizontal speed for which an MCWP has been designed

3.3

transfer

any horizontal movement of an MCWP from one position to another on the same working site

3.4

transport

any movement of an MCWP outside the boundaries of the working site

3.5

base frame

part of an MCWP that provides support for the mast and elevating assembly

3.6

chassis

part of an MCWP that provides mobility and support for the mast and elevating assembly

3.7

outriggers

supports at the base frame level used to maintain or increase the stability of an MCWP within specified conditions

NOTE They may also be used for levelling.

3.8

mast

structure that supports and guides the platform

3.9

guides

parts of the mast, which provide guiding for the work platform

3.10

mast tie

anchorage system used to provide lateral restraint to the mast from the building or other structure

3.11

work platform

vertical travelling part of the installation upon which the persons, equipment and materials are carried, and from which work is carried out

NOTE This is as opposed to an MCWP, which refers to the whole of the installation, among others the work platform, mast, mast ties, base and chassis. The work platform includes the main platform and any platform extension.

3.12

main platform

part of the work platform that is built up using primary structural elements

3.13

buffer

resilient stop at the end of the travel, comprising a means of arresting using fluids, springs or similar means

3.14

overspeed

any speed above rated speed

3.15

safety gear

mechanical device for stopping and maintaining the work platform stationary on the mast in the event of overspeed

3.16

competent person

person having such practical and theoretical knowledge and such experience of MCWPs as is necessary to carry out the task in hand satisfactorily

3.17**supplier-appointed person**

person appointed by the MCWP supplier who is responsible for planning the installation, method statements for the erection, safe operation, inspection, maintenance, thorough examination and dismantling of MCWPs

3.18**management/user-appointed person**

person appointed by the management or user who is responsible for devising safe systems of work and other aspects of use of MCWPs

3.19**installer**

person(s) responsible for installation, including erection, modification and dismantling of MCWPs

3.20**demonstrator**

person(s) responsible for the management of safe use, inspection, servicing and maintenance of MCWPs and the induction of users on the site

3.21**operator**

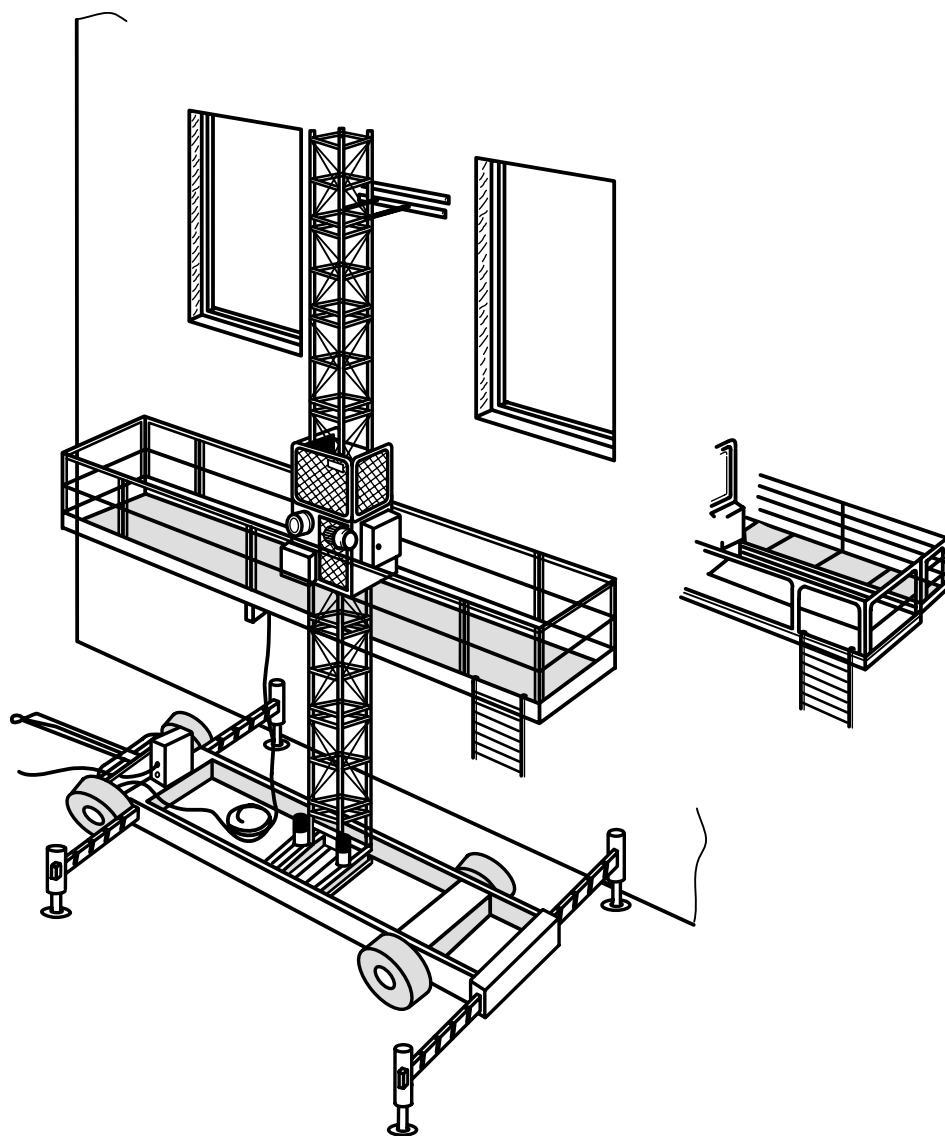
person(s) responsible for the operation and limited transfer on site of mobile MCWPs

3.22**user**

person(s) responsible for the raising or lowering of MCWPs

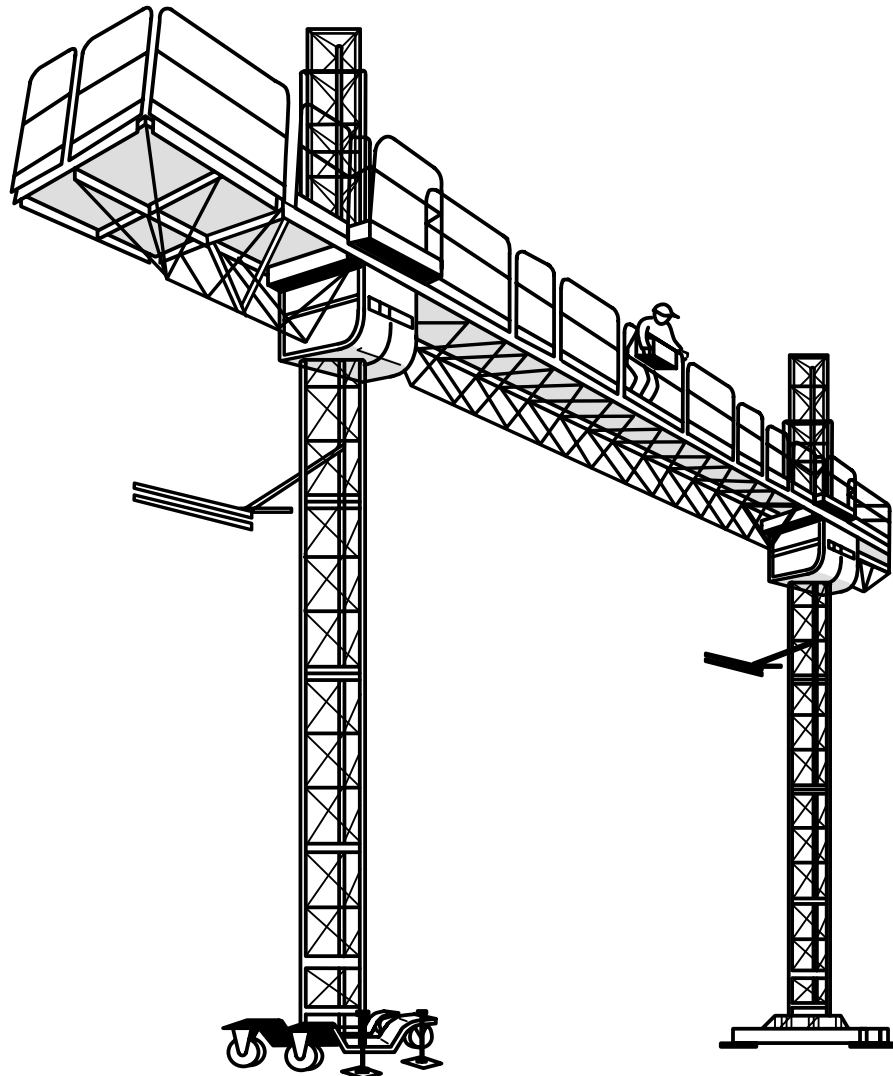
3.23**mobile MCWP installation**

MCWP installation with no more than two ties, which is suitably designed for horizontal transfer on site



NOTE Base protection omitted for clarity.

Figure 1 — Typical single mast mobile MCWP



NOTE Base protection omitted for clarity.

Figure 2 — Twin mast MCWP illustrating one fixed and one mobile chassis