



Expert commentary

BS EN 280-1:2022 Mobile elevating work platforms – *Part 1: Design calculations – Stability criteria – Construction – Safety – Examinations and tests*

Brian Parker, Grad IOSH, Head of Safety and Technical, International Powered Access Federation (IPAF)

1 Overview

BS EN 280-1:2022, the third edition of this standard, supersedes and replaces BS EN 280:2013+A1:2015. It is a type-C standard, as stated in BS EN ISO 12100:2010, which defines type-C standards as 'machine safety standards dealing with detailed safety requirements for a particular machine or group of machines' – for example, Mobile Elevating Work Platforms (MEWPs). Type-C standards cover all the essential health and safety requirements of the European Union (EU)'s Machinery Directive for a particular machine or group of machines.

The objective of BS EN 280-1:2022 is 'to define rules for safeguarding persons and objects against the risk of accidents associated with the operation of MEWPs'. The level of change incorporated into the revised version of the standard is medium but it does include some major changes with respect to BS EN 280:2013+A1:2015. The main changes are:

- the standard has been split into two parts, with BS EN 280-2 being a new standard that is to be used in conjunction with BS EN 280-1 – Part 2's scope establishes that the 'load-lifting appliance is designed for lifting suspended loads only as part of the task being carried out by personnel from the work platform'¹
- the addition of new definitions of testing positions that a MEWP may be subjected to under normal use when it is either static or travelling
- the requirements for the MEWP's load sensing system now describe subtle differences for different groups and types
- the requirements for manual adjustment of the work platform levels exceeding 5 ° were amended (only possible when the extending structure is stationary)
- the subclause titled 'Protection of hands' has been totally reworded with regard to different requirements for different types and categories of MEWPs
- the standard now considers the position of the controls, guardrails and handles on the platform, and clarifies that on certain types of MEWPs they should be designed in such a way as to reduce trapping and crushing of the hands
- the subclause titled 'Kerb and depression tests', for MEWPs of type 2 and 3, has been fully restructured and amended due to a necessary change in the testing and examination regime
- there is now a requirement for designing out noise emission characteristics, sound power levels and emission sound pressure levels at user workstations, which means that MEWP manufacturers need to declare the noise emitted at ground and platform workstations in order to help users undertake a noise risk assessment
- there is an increase in the platform anchorage point strength from 3 kN to 6 kN, as well as the option to label the anchorages as fall restraint or fall arrest
- there is a revised Annex F and Annex ZA, which means clause and subclause numbers users may be familiar with from BS EN 280:2013+A1:2015 are typically reduced by one in BS EN 280-1:2022 (e.g. Subclause 5.11 'Safety devices' is now Subclause 4.11 'Safety devices and safety functions'), because the table of significant hazards has moved to become Annex A rather than being located within the main body of the text – therefore, references in users' documentation to clause and subclause numbers may require updating
- there is a new normative Annex M providing a noise test code with the necessary information to carry out the determination, declaration and verification of the noise emission characteristics of the MEWP; there is also a new requirement for MEWP manufacturers to design out the generation of airborne noise

In addition, further revisions are:

- the definitions have been updated in order to be consistent with other documents and standards
- the normative references have been updated, including reference to BS EN ISO 11201:2010 with respect to noise emitted by MEWPs
- there is a new informative Annex L incorporating a workflow on describing the operator recovery procedure considering E-stop status, overrides and the availability of primary power

1.1 Reason for change

The main reason for the revision of the standard was to update it with regards to the technological advances made in MEWP design and testing since the previous edition was published.

1.2 Summary

The European foreword summarizes the most notable changes made in this third edition of the standard:

- 'definition of "travelling" has been precised
- new definition of "lowered travel position"

¹ At the time of publication of this expert commentary, BS EN 280-2 is still under development and its anticipated publication date is in 2022.