



**BSI Standards Publication** 

# Specification for collective fall arrest soft landing systems



...making excellence a habit."

## PAS 59:2014

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# Foreword

## **Publishing information**

This PAS was sponsored by Forest Safety Products Limited. Its development was facilitated by BSI Standards Limited and published under licence from The British Standards Institution. It came into effect on 31 January 2014.

Acknowledgement is given to the following organizations that were involved in the development of this PAS as members of the steering group:

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The PAS process enables a specification to be rapidly developed in order to fulfil an immediate need in industry. A PAS can be considered for further development as a British Standard, or constitute part of the UK input into the development of a European or International Standard.

#### **Supersession**

This PAS supersedes PAS 59:2004, which is withdrawn.

#### Information about this document

Text introduced or altered by Corrigendum No. 1 is indicated in the text by tags  $C_1 \land C_1$ . Minor editorial corrections are not tagged.

It is intended that this PAS should provide the basis for product conformity certification schemes to provide assurance that collective fall arrest soft landing systems placed on the market have been independently tested and confirmed as being in accordance with the requirements of this PAS.

Users of this PAS are therefore advised to consider the desirability of third-party certification of products in conformance with this PAS.

#### Use of this document

It has been assumed in the preparation of this PAS that the execution of its provisions will be entrusted to a competent person or persons for whose use it has been produced.

This specification is not intended to restrict new developments in design and materials and manufacturers of collective fall arrest soft landing systems may seek innovative provision of such systems provided their performance is in accordance with the requirements of this PAS.

## **Presentational conventions**

The provisions of this PAS are presented in roman (i.e. upright) type. Its requirements are expressed in sentences in which the principal auxiliary verb is "shall". Its recommendations are expressed in sentences in which the principal auxiliary verb is "should".

Commentary, explanation and general informative material is presented in italic type, and does not constitute a normative element.

#### **Contractual and legal considerations**

This publication does not purport to include all the necessary provisions of a contract. Users are responsible for its correct application.

#### Compliance with a PAS cannot confer immunity from legal obligations.

Particular attention is drawn to the following specific regulations:

- The Work at Heights Regulations 2005 [1];
- The Construction (Design and Management) Regulations 2007 [2];
- The Management of Health and Safety at Work Regulations 1999 [3];
- The Provision and Use of Work Equipment Regulations 1998 [4].

# Introduction

Regulations concerning the use of work equipment at height (see Foreword), require employers to take suitable and sufficient measures to prevent any person falling and where fall prevention is impractical to take action to ensure that the height and consequences of a fall are minimised. Collective fall arrest soft landing systems should be considered in this context by virtue of their ability to reduce the free fall height and provide a suitable landing surface. In all cases, employers are required to ensure that work at height, including emergencies and rescue, is subject to a risk assessment, properly planned by a competent person, appropriately supervised and carried out in a safe manner.

# 1 Scope

This PAS specifies requirements for a collective fall arrest soft landing system intended for installation on a continuous, firm, level surface in order to restrict the deceleration of a person falling onto it to a maximum of 14 g, from a free fall height not more than the maximum free fall height for which the system has been tested.

This PAS includes performance requirements and related test methods, requirements for conformity marking and for the provision of installation and usage instructions.

This PAS is not applicable to air/gas filled systems that are designed to be inflated/deflated on site or to those that have individual cell volume greater than 0.5% of the volume of the module in which they are inserted.

This PAS is not applicable to fall arrest systems that are suspended.

This PAS is not applicable to personal protective equipment against falls from a height.

This PAS does not provide for the containment of falling debris.

# 2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendment) applies.

BS 5852, Methods of test for assessment of the ignitability of upholstered seating by smouldering and flaming ignition sources

BS 7479, ISO 9227, Method for salt spray corrosion tests in artificial atmospheres

BS EN 364:1993, Personal protective equipment against falls from a height – Test methods

BS EN ISO 4892-3, Plastics – Methods of exposure to laboratory light sources – Part 3: Fluorescent UV lamps

BS EN ISO/IEC 17025, General requirements for the competence of testing and calibration laboratories

# 3 Terms and definitions

For the purposes of this PAS, the following terms and definitions apply.

## 3.1 boundary walls

rigid barriers defining the boundary of a protected area that prevent the modules of a constrained fall arrest system from moving from their designated location