BS 7883:2019

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Personal fall protection equipment – Anchor systems – System design, installation and inspection – Code of practice

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Summary of pages

This document comprises a front cover, and inside front cover, pages i to vi, pages 1 to 130, an inside back cover and a back cover.

Foreword

Publishing information

This British Standard is published by BSI Standards Limited, under licence from The British Standards Institution, and came into effect on 30 November 2019. It was prepared by Technical Committee PH/5, *Personal Fall Protection*. A list of organizations represented on this committee can be obtained on request to its secretary.

Supersession

BS 7883:2019 supersedes BS 7883:2005, which is withdrawn.

Relationship with other publications

This British Standard is intended to complement BS 8610, BS EN 795, PD CEN/TS 16415 by recommending good practice as followed by competent practitioners for installing and maintaining products conforming to those standards.

Information about this document

This British Standard provides information relating to anchor systems and recommendations for installation and use in conjunction with personal fall protection equipment for protection against falls from a height.

This revision of BS 7883 gives recommendations additional to those in the previous edition for system design, installation and inspection of anchor systems, including:

a) the role of the system designer is introduced;

b) applications and product types have been introduced, based on BS 8610;

c) recommendations have been introduced for:

   1) documentation, including the system technical file;

   2) configurations in use, in particular rope access;

   3) positioning;

   4) proof test loads; and

   5) the inspection of previously installed anchor systems.

Use of this document

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.

Any user claiming compliance with this British Standard is expected to be able to justify any course of action that deviates from its recommendations.

It has been assumed in the preparation of this British Standard that the execution of its provisions will be entrusted to appropriately qualified and experienced people, for whose use it has been produced.

The provisions of this standard are presented in roman (i.e. upright) type. Its recommendations are expressed in sentences in which the principal auxiliary verb is “should”. This British Standard includes examples which are illustrative and not a definitive list.

Commentary, explanation and general informative material is presented in smaller 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 British Standard cannot confer immunity from legal obligations.

Particular attention is drawn to the following specific regulations:

- The Work at Height Regulations 2005 (as amended) [1].
- The Construction (Design and Management) Regulations 2015 (CDM) [2].
- The Lifting Operations and Lifting Equipment Regulations 1998 (LOLER) [3].
- The Provision and Use of Work Equipment Regulations 1998 (PUWER) [4].
- The Workplace (Health, Safety and Welfare) Regulations 1992 [5].

0 Introduction

The dangers of working at height are not always apparent. Engineered controls have to be devised to protect persons working at height against the effects of gravity, i.e. falls from a height. Anchor systems are an essential part of such controls.

This British Standard is intended to guide system designers, installers, inspectors, duty holders, rescuers and users of anchor systems for fall protection in their safe use and relates primarily to anchor systems conforming to BS 8610 (see Table 1 and Table 2) and anchor devices conforming to BS EN 795 and PD CEN/TS 16415 (see Table 3).

For clarification, BS 8610 specifies the type testing of anchor systems comprising the anchor device, the structural anchor and the base material for the following applications (single and multi-user):

a) restraint;

b) fall arrest;

c) rope access;

d) work positioning;

e) rescue; and

f) evacuation.

The test requirements within BS EN 795 are restricted to single user, fall arrest only and do not necessarily cover the structural anchor(s) and/or base material.

NOTE PD CEN/TS 16415 specifies requirements for multiple users, fall arrest only.

Table 1 — *Non-load-limiting anchor system options and codification in accordance with BS 8610:2017, Table 1*

Type	Application code	Application use
A – e.g. eyebolt[A)]/post	1	Restraint
	2	Fall arrest
	3	Rope access and work positioning
	4	Rescue – accompanied descent
	5	Rescue – remotely or self-operated – direct attachment
	6	Rescue – remotely operated – redirect attachment
	7	Evacuation
C – e.g. flexible horizontal anchor line	1	Restraint
	2	Fall arrest
	5	Rescue – remotely or self-operated – direct attachment
D – e.g. rigid horizontal anchor line	1	Restraint
	2	Fall arrest
	3	Rope access and work positioning
	4	Rescue – accompanied descent
	5	Rescue – remotely or self-operated – direct attachment
	6	Rescue – remotely operated – redirect attachment
	7	Evacuation

[A)] As an example of codification, an eyebolt for fall arrest – non-load-limiting would be type A2.

NOTE Class A1 anchor devices that conform to BS EN 795:1997 are not the same as type A1 anchor systems (for restraint) that conform to BS 8610.

Type	Application code	Application use	Load-limiting
A – e.g. eyebolt[A)]/post	1	Restraint	L
	2	Fall arrest	L
	5	Rescue – remotely or self-operated – direct attachment	L
C – e.g. flexible horizontal anchor line	1	Restraint	L
	2	Fall arrest	L
	5	Rescue – remotely or self-operated – direct attachment	L

[A)] As an example of codification, an eyebolt for restraint – load-limiting would be type A1L.

Table 3 — *Anchor devices in accordance with BS EN 795:2012 and PD CEN/TS 16415:2013*

Type	Application code	Application use
A – e.g. eyebolt/post	—	Suitable for multiple applications as specified in the information supplied by the manufacturer
B – anchor device without structural anchor	—	Suitable for multiple applications as specified in the information supplied by the manufacturer
C – horizontal flexible anchor line	—	Suitable for multiple applications as specified in the information supplied by the manufacturer
D – horizontal rigid anchor line	—	Suitable for multiple applications as specified in the information supplied by the manufacturer
E – anchor device relying on mass and friction	—	Suitable for multiple applications as specified in the information supplied by the manufacturer

NOTE 1 BS EN 795 and PD CEN/TS 16415 do not have a coding system for application and cover non-load-limiting and load-limiting anchor devices.

NOTE 2 For clarification, BS EN 795 and PD CEN/TS 16415 cover only anchor devices and not the structural anchor or the base material.

Section 1: General

1 Scope

This British Standard gives recommendations for the system design, installation, use, maintenance and inspection of anchor systems incorporating anchor devices conforming to BS EN 795, PD CEN/TS 16415 and/or anchor systems conforming to BS 8610.

This British Standard also gives recommendations for the inspection of anchor systems installed prior to this edition of the British Standard.

NOTE 1 Anchor systems installed prior to this edition of the British Standard, but which have been inspected in accordance with Section 4, can only be certified as meeting the inspection recommendations of Section 4. The inspector can only claim that the anchor system conforms to the British Standard to which it was originally installed, e.g. "the anchor system was installed in accordance with BS 7883:2005 and the inspection has been carried out in accordance with BS 7883:2019, Section 4".

This British Standard is only applicable to anchor systems for the direct attachment of PFPE for use in the workplace.

This British Standard is not applicable to:

a) the lifting of equipment;

b) anchor points comprising holes formed in the base material for the direct attachment of personal fall protection equipment (PFPE), e.g. hole drilled through steel girder;

c) anchor points formed by the welded attachment of bars or plates to steel structures for the direct attachment of the PFPE, e.g. loops of steel bar or flat plates incorporating a hole, welded to a steel structure, unless:

   1) such anchor points form part of a manufactured product which has been successfully tested in accordance with BS 8610; or

   2) the manufacturer, installer or inspector of such anchor points can demonstrate that the anchor point conforms to all relevant requirements of BS 8610, BS EN 795 or PD CEN/TS 16415, in which case the documentation certifying conformity to BS 8610, BS EN 795 or PD CEN/TS 16415 becomes part of the documentation provided to the duty holder;

d) anchor systems for attachment of collective protection systems, e.g. work positioning platforms and fall arrest nets; and

e) personal fall protection systems (PFPS) and equipment for use in leisure activities or in professional and private sports activities.

This British Standard is intended for use by system designers, installers, inspectors and users of anchor systems, including other interested parties, e.g. architects and structural engineers, and those who are responsible for the design of safe access and egress on buildings and structures.

NOTE 2 Advice on the selection, use and maintenance of PFPS and equipment for use in the workplace is given in BS 8437 and recommendations and guidance on the use of rope access methods for industrial purposes are given in BS 7985.

