

Code of practice for

# Application and use of anchor devices conforming to BS EN 795

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# Committees responsible for this British Standard

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- Arboricultural Safety Council
- Association of Consulting Scientists
- British Constructional Steelwork Association Ltd.
- British Electrical Systems Association (BEAMA Ltd.)
- British Narrow Fabrics Association
- British Telecommunications plc
- Confederation of British Forgers
- Construction Fixings Association
- Cordage Manufacturers' Institute
- Electricity Association
- Health and Safety Executive
- Industrial Rope Access Trade Association
- National Engineering Laboratory
- National Federation of Master Steeplejacks and Lightning Conductor Engineers
- SATRA Footwear Technology Centre
- Safety Equipment Association
- Suspended Access Equipment Manufacturers' Association
- TES-Bretby Ltd.

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# Foreword

This British Standard has been prepared by Technical Committee PH/5. Together with BS EN 795 : 1997 it supersedes BS 5845 : 1991, which is withdrawn.

It provides information relating to anchor devices and recommendations for their installation and for the connection of personal protective equipment (PPE) for protection against falls from a height. This code of practice is intended to complement, and should be read in conjunction with, BS EN 795 : 1997.

This code of practice is intended to complement BS EN 795 by recommending good, accepted practice and practical experience followed by competent practitioners. It is important, however, that it should not be considered as an alternative to, or to be in conflict with, BS EN 795.

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.

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

**Compliance with a British Standard does not of itself confer immunity from legal obligations.**

## Introduction

Gravity is dangerous because it cannot be detected by the human senses. It cannot be isolated, minimized or segregated from workers in the same way that other occupational hazards are. Engineered controls have to be devised to protect workers from its effects, i.e. falls from a height, of which there are two basic types, fall restraint systems and fall arrest systems.

This second amendment adds several new sub-clauses as a result of safety concerns brought to the attention of BSI Technical Committee PH/5. In some cases, the recommendations given in those clauses are different from, or additional to, the content of BS EN 795. Relevant amendments to EN 795 have been proposed to CEN/TC 160, and it is hoped that these will be incorporated at the earliest possible opportunity. It may be necessary to issue a further amendment to this code of practice once EN 795 has been revised.

# Code of practice

## 1 Scope

This British Standard gives recommendations for anchor devices used in the direct attachment of personal protective equipment (PPE), which protect against falls from a height, and for no other purpose. Recommendations on the fixture of such anchors to existing buildings and new construction are included together with methods of test and test recommendations for assessing the suitability of anchors. It is intended to be used in conjunction with BS EN 795. Anchor devices as specified in BS EN 795 and in this code of practice are primarily intended for use in fall arrest systems, but may also be used in fall restraint systems.

This code of practice is based on the application and use of PPE for protection against falls from a height conforming to the requirements of the following standards:

|           |             |             |
|-----------|-------------|-------------|
| BS EN 341 | BS EN 353-1 | BS EN 353-2 |
| BS EN 354 | BS EN 355   | BS EN 358   |
| BS EN 360 | BS EN 361   | BS EN 362   |
| BS EN 363 |             |             |

Recommendations concerning the connection of safety lanyards are included.

The advice and recommendations in this code of practice only cover anchor devices for the direct attachment of other PPE in accordance with BS EN 363.

## 2 Normative references

This British Standard incorporates, by reference, provisions from specific editions of other publications. These normative references are cited at the appropriate points in the text and the publications are listed on the inside back cover.

Subsequent amendments to, or revisions of, any of these publications apply to this standard only when incorporated in it by updating or revision.

## 3 Definitions

For the purposes of this British Standard, the following definitions apply.

### 3.1 anchor device

Element, or series of elements, which incorporates an anchor point or anchor points.

NOTE. An anchor device comprises a complete set of elements, incorporating a structural anchor and an anchor point.

### 3.2 element

Part of a component or a sub-system.

NOTE. Ropes, webbing, attachment elements, fittings and anchorage lines are examples of elements.

### 3.3 component

Part of a system at a point of sale by the manufacturer, supplied with packaging, marking and instructions for use.

NOTE. Body supports (e.g. harnesses) and lanyards are examples of components of systems.

### 3.4 anchor point

Element to which personal protective equipment may be attached after installation of the anchor device.

### 3.5 structural anchor

Element, or elements, permanently secured to a structure, to which an anchor device or personal protective equipment may be attached.

### 3.6 extremity structural anchor

Structural anchor at each extremity of a flexible anchor line.

### 3.7 intermediate structural anchor

Additional structural anchor or anchors which may be necessary between the extremity structural anchors.

### 3.8 anchor line

Flexible line between structural anchors, to which personal protective equipment can be attached.

### 3.9 anchor rail

Rigid line between structural anchors, to which personal protective equipment can be attached.

### 3.10 mobile anchor point

Additional, movable element on the anchor line or anchor rail, to which personal protective equipment may be attached.

### 3.11 attachment

Device attached to the mobile anchor point of a flexible anchor line which performs to the manufacturer's specification.

NOTE. A lanyard and an energy absorber are examples of an attachment.

### 3.12 sub-system

Assembly of elements and/or components making up a larger part of a system.

### 3.13 fall factor (ff)

Ratio of the free fall distance (see 3.14) to the length of the connecting lanyard including any connectors, both quantities being expressed in the same units of measure.

### 3.14 free fall distance

Total vertical distance through which a worker could fall, from the start of the fall to the onset of arrest.

### 3.15 fall restraint systems

Protection which prevents or restrains a worker from reaching a position from which a fall could occur.

### 3.16 fall arrest systems

Protection which limits the extent of the fall, i.e. 'arrests' the fall.



## 4 Classification

### 4.1 Class A

#### 4.1.1 Class A1

Class A1 comprises structural anchors designed to be secured to vertical, horizontal and inclined surfaces, e.g. walls, columns, lintels, as shown in figure 1.

#### 4.1.2 Class A2

Class A2 comprises structural anchors designed to be secured to inclined roofs, as shown in figure 2.

### 4.2 Class B

Class B comprises transportable temporary anchor devices, as shown in figure 3.

### 4.3 Class C

Class C comprises anchor devices employing horizontal flexible lines, as shown in figure 4.

NOTE. For the purposes of this standard a horizontal line is understood to be a line which deviates from the horizontal by not more than 15°.

### 4.4 Class D

Class D comprises anchor devices employing horizontal rigid anchor rails, as shown in figure 5.

### 4.5 Class E

Class E comprises dead weight anchors for use on horizontal surfaces, as shown in figure 6.

NOTE. For the use of dead weight anchors a horizontal surface is understood to deviate from the horizontal by not more than 5°.

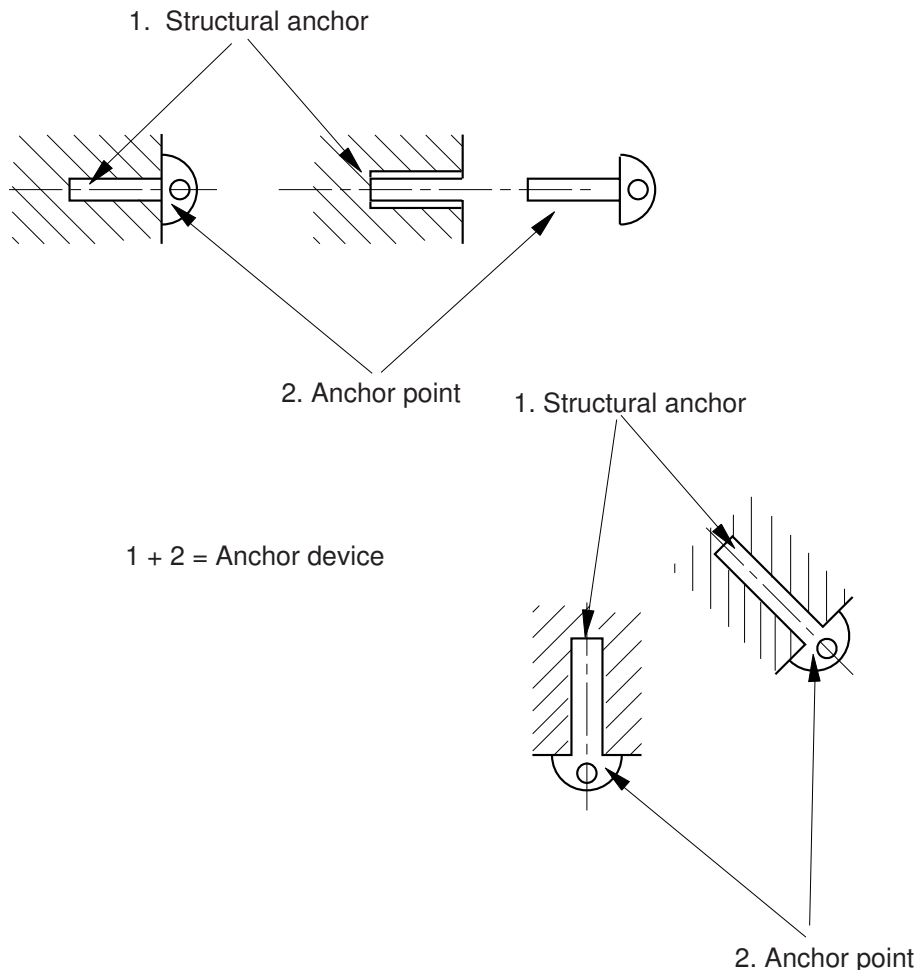


**Figure 1. Class A1 — Examples of structural anchors designed to be secured to vertical, horizontal and inclined surfaces, e.g. walls, columns, lintels**