

#### BS 8437:2005+A1: 2012

# Code of practice for selection, use and maintenance of personal fall protection systems and equipment for use in the workplace

The British Standards Institution (BSI) has issued Amendment 1 to BS 8437;2005 (August 2012). BS 8437:2005+A1:2012 supersedes BS 8437:2005, which is withdrawn.

BS 8437:2012, "... gives recommendations and guidance on the selection, use and maintenance of personal fall protection systems and equipment for use in the workplace to prevent and/or to arrest falls from a height, including systems and equipment suitable for use in rescue. It also gives guidance on rescue of persons working at a height, in the event of an accident".

The main changes include:

- Legislative updates
- Update of Table 1, Illustration of hierarchy of protective measures
- Clarified advice on work restraint systems
- Latest information on suspension intolerance (previously known as suspension trauma)
- Further advice on twin-tailed lanyards (and a link to BS 8513)
- Further advice on retractable type fall arresters
- A warning on the use of a vertical anchor line and a guided type fall arrester
- A cross reference to BS 8454:2006, Code of practice for the delivery of training and education for work at height and rescue
- A note about anchors to BS EN 795:1997, Classes A, C and D not being considered by the European Commission to be "personal protective equipment"
- Updated references and bibliography

For further details, see **Annex A**.

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# **ANNEX A** BS 8437:2005+A1 - Main changes

BS 8437:2005+A1:2012 has been published. It supersedes BS 8437:2005, which is withdrawn. The main changes are listed (not exhaustive):

### Normative references (Clause 2)

BS 7985:2002 changed to BS 7985:2009

## Legislation (Clause 4)

#### 4.1 General

CDMR 1994 changed to CDMR Regulations 2007 (and ACoP, HSE L144)

WAHR 2005 has been amended by the Work at Height (Amendment) Regulations 2007, SI 2007/114

Delete reference to CHSWR 1996

### 4.7 Health and Safety File

This is now Clause 4.6 and states:

4.6 Construction (Design and Management) Regulations 2007

Where the CDM Regulations apply, there is a requirement for a construction-phase health and safety plan and a health and safety file. These are required, where applicable, to contain information concerning the safety aspects of work at height in construction work and should be made available to those planning work at height. When construction work has been completed, there could be a need to update the health and safety file.

## Fundamental principles (Clause 5)

#### 5.3.2 Training and assessment of users

A 'Note' has been added about the recommendations and guidance in BS 8454 for training providers.

# Table 1 Illustration of hierarchy of protective measures

Category of work equipment

Change, "Work equipment which minimizes the height and consequences of a fall" to, "Work equipment which minimizes the distance and consequences of a fall"

## Collective

- Change, "Multi-user mobile elevating work platforms (MEWPs)" to "Mobile elevating work platforms (MEWPs)"
- Change, " $(\leq 7 \text{ m below the work})$ " to " $(\leq 6 \text{ m below the work})$ "

## Personal

Delete "Single-user MEWPs"

## Selection of personal fall protection systems and equipment (Clause 7)

7.2.2, Line 1 - "reach" inserted after "possible to"

7.2.3, Para. 1, Last line (and 7.2.4, Last line) - BS 7985:2002 changed to BS 7985

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## Restraint systems (Clause 8)

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#### 8.3 Use of restraint systems

Change 'Note 2' to:

ACR(M)001 Test for non-fragility of profiled sheeted roofing assemblies published by the Advisory Committee for Roof Work [7].

Where a horizontal anchor line is used, it should be positioned such that any deflection generated by the user(s), e.g. by pulling on it, does not allow a fall from a height to take place (see 16.4.1 and Figure 50).

## Fall arrest systems (Clause 9)

# 9.1.1 Basic characteristics of a fall arrest system

Second dashed list, Last item - Change "suspension trauma" to "suspension intolerance"

## 9.2.3 Systems based on a twin tailed energy absorbing lanyard

New 'note' added (with the existing 'note' renumbered as NOTE 2):

NOTE 1 Twin tailed energy absorbing lanyards are specified in BS 8513

## Para. 4, Lines 2 and 3 – Add:

... unless there is a specially designed parking point for this purpose designed to separate from the harness, belt or clothing" after, "The second lanyard should not be attached to the user's harness or to their belt or clothing,

#### 9.3.7.3 Warning (First sentence) - Amend, as follows:

... that specifies testing of a fall arrest system based on a retractable type fall arrester under conditions corresponding to use at an angle deviating from the vertical, or to a fall over an edge,

#### 9.3.7.7 First sentence - Change to:

e.g. a cantilever beam or a flexible horizontal anchor line

9.4 Fall arrest systems based on a vertical anchor line and a guided type fall arrester

## 9.4.1 General

A 'Warning' has been included about users whose fall might not be arrested (or who may fall an unacceptable distance before their fall is arrested) when falling in a backwards or sideways direction away from an access ladder when using guided type fall arresters conforming to BS EN 353-1:2002. Attention is drawn to the 'Warning' in the National Foreword to BS EN 353-1: 2002, Personal protective equipment against falls from a height -Guided type fall arresters including a rigid anchor line.

# 9.4.5 - After the sentence following 'Note 1' add:

WARNING. See the Warning in 9.4.1 regarding guided type fall arresters to BS EN 353-1:2002

# Rescue (Clause 11)

### 11.1.1 First line

Change, "It is essential ... worksite.." to , "The Work at Height Regulations 2005 (as amended) require that there is a specific rescue plan and resources in place for each worksite..."

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11.1.3, Third list item Continued...

Delete, "suspension trauma" and substitute "suspension intolerance"

# 11.4 Care of individuals requiring rescue

Delete 11.4.1 to 11.4.5 and include:

Even though great care and attention has been given to safe working, incidents can still happen. The survival of an injured or otherwise immobile person often depends on the speed of rescue and the care given to the casualty during and after rescue. Consequently, great importance should be attached to examining the worksite at appropriate times, for example, each day or at each change of job, to assess all possible emergency scenarios, and to plan how any resulting rescues would be carried out. Provisions should be made to ensure that help is provided promptly to any worker who needs it or who is unable to communicate and might be in danger, for example, from suspension intolerance. Information on suspension intolerance is given in Annex D

11.7, Line 3

Change, "suspension trauma" to "suspension intolerance"

## Components (Clause 12)

12.4.4, Footnote 2

Change web address to:

http://www.corrosion-doctors.org/Forms-galvanic/galvanic-corrosion.htm

Add the following 'Warning' after Note 1 (in 12.9.4 a)):

WARNING. See the Warning in 9.4.1 regarding guided type fall arresters to BS EN 353-1:2002

## Inspection, care and maintenance of equipment (Clause 13)

13.1.2, Line 2 - Change to:

... to ensure that personal fall protection equipment is given a detailed inspection (or "thorough examination" where the requirements of LOLER apply) ...

## Methods of work (Clause 14)

14.2.3.1. First sentence changed to:

The CDM Regulations 2007, Regulation 26, require a safe place of work. Also, the Work at Height Regulations 2005, as amended, Regulation 6, require work to take place, where possible, from "an existing place of work

## Aptitude, fitness and training (Clause 15)

New note added at the end of 15.2.1:

NOTE BS 8454 gives recommendations and guidance for training providers to enable them to ensure that training for work at height is delivered to a high standard, in a safe, controlled environment by competent and experienced staff

Anchors (Clause 16)

16.1.4 - Add the following 'Note':

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NOTE Anchors to BS EN 795:1997, Classes A, C and D are not considered by the European Commission to be "personal protective equipment" (see 7.1.2.1).

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16.2.4, Note, Last line:

Change BS 7985:2002, 12.3.5.2 to BS 7985:2009, 12.3.5.2

## Harness comfort and adjustability test (Annex B)

B.2.2, Note - Delete the existing 'Note' and substitute the following new note.

NOTE In the extremely unlikely event of any of these symptoms occurring, the user should be removed from suspension immediately and standard first aid guidance should be followed. If the symptoms persist it is recommended that the user should be taken to hospital immediately for further professional medical care and observation.

## Suspension trauma (Annex D)

Delete the existing Annex D and substitute with the corresponding Annex in BS 7985:2009: Annex D (informative)

Suspension intolerance (formerly known as suspension trauma)

Attention is drawn to the fact that the current HSE recommendations on the treatment of suspension intolerance (see D.7) differ from previous practice, and from the guidance given in BS 8437:2005 and BS 7985:2002.

NOTE This annex has been updated to align with the corresponding annex in BS 7985:2009 ... etc. ...

## Properties of some artificial fibres (Annex H)

Table H.2, Column 6

Change the column heading from, "High performance polypropylene" to read, "High performance polyethylene".

## Affect of wind speed (Annex I)

Dashed list, First item - Change to read as follows:

- BS 5975:2008+A1, 17.5.1.9, in relation to falsework states:

A maximum working wind force during operations is assessed as the maximum velocity pressure during which working operations can take place and is normally limited to that of a wind force, on the Beaufort Scale, of Force 6. This corresponds to a design velocity pressure of 18 m/s and gives a working velocity pressure qw equal to 200 N/m<sup>2</sup>.

# **Bibliography**

Standards publications Update BS 5975:1996 to BS 5975:2008+A1:2011

Add BS 8454 and BS 8513

Other publications

Update the following references: [1], [2], [3] and [7].

Revise the address in Footnote 3).

Add the following new reference: [15] Research Report RR708, Evidence-based review of the current guidance on first aid measures for suspension trauma.

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