

CODE OF PRACTICE FOR THE DESIGN, SELECTION, INSTALLATION, USE AND MAINTENANCE OF ANCHOR DEVICES CONFORMING TO BS EN 795

INTRODUCTION

Legislation places a duty on employers, the self-employed and any person who controls the work of others to do all that is reasonably practicable to prevent anyone from falling.

If work at height cannot be avoided and collective measures such as guardrails are not suitable or possible, engineered solutions such as lifelines will be specified. These controls are designed to protect people working at height against the effect of gravity should they fall. Anchor devices are a vital part of these controls so must be installed and maintained to current standards to ensure that they are safe to use at all times.

OVERVIEW

BS 7883: 2005 complements BS EN 795 and recommends accepted practices which should be followed by competent people.

This British Standard supersedes BS 7883:1997 and provides guidance for anchor devices, their installation and use in conjunction with PPE. Recommendations include:

- ◆ System components should only be used in the way in which they have been approved for use according to the type tests in BS EN 795.
- ◆ The force used for the proof load test for anchor devices following installation (except in cavity constructions) should be 6kN as opposed to 5kN which was recommended in BS 7883.
- ◆ This revision has come about because the performance requirements specified for components of personal fall protection systems and equipment (e.g. BS EN 353-1, BS EN 353-2, BS EN 354, BS EN 355, BS EN 360 and BS EN 363) are based on the need to ensure that the impact force on the user during the arrest of a fall (dynamic force) does not exceed 6kN.

Note: These requirements take precedence over recommendations in BS EN 795 which is currently under review and is expected to also be changed to 6kN.

WHAT IS DIFFERENT FROM BS 7883: 1997?

BS 7883: 2005 provides additional advice on safety issues relating to the installation of anchorage devices. For example:

Competent Person

This outlines the need to make sure you only use a competent person/company for the examination of equipment in accordance with the manufacturer's recommendations.

This person should fully understand the issues relating to working at height; be aware that work at height is now any height, not just 2m or above; understands fall arrest systems and appreciates the minimum distance a person will travel before the system arrests the fall.

The 'Competent Person' should also be able to identify any defects in a component such as anchor devices, appreciate the significance of the defect and ensure that the problem is rectified.

Positioning advice specific to Class A, C & D Anchor Devices

Class A 1 – Anchor devices such as eyebolts which are designed to be secured to vertical, horizontal & inclined surfaces (walls, columns and lintels)

Class A 2 –Anchor devices designed to be secured to inclined roofs.

Class C – Anchor devices employing horizontal flexible anchor lines. (anchor line which deviates from the horizontal by no more than 15° .

Class D – Anchor devices using horizontal rigid anchor lines (usually rails).

The distance from the anchor device to the edge of the structure that it is attached to is vital in order to avoid the possibility of the substrate failing. Advice from the anchor device manufacturer regarding usage with different types of structural material should always be followed.

Resin bonded or through fixed structural anchors: these should be installed at least 280 mm from the edge of the brick in unplastered brickwork or 290mm for plastered brickwork in order to ensure optimum strength.

When installing in solid masonry or concrete, anchor devices should not be installed less than 150mm from the edge without the written approval of the manufacturer or a suitably qualified engineer.

These distances might need to be greater for anchor devices incorporating other types of structural anchor.

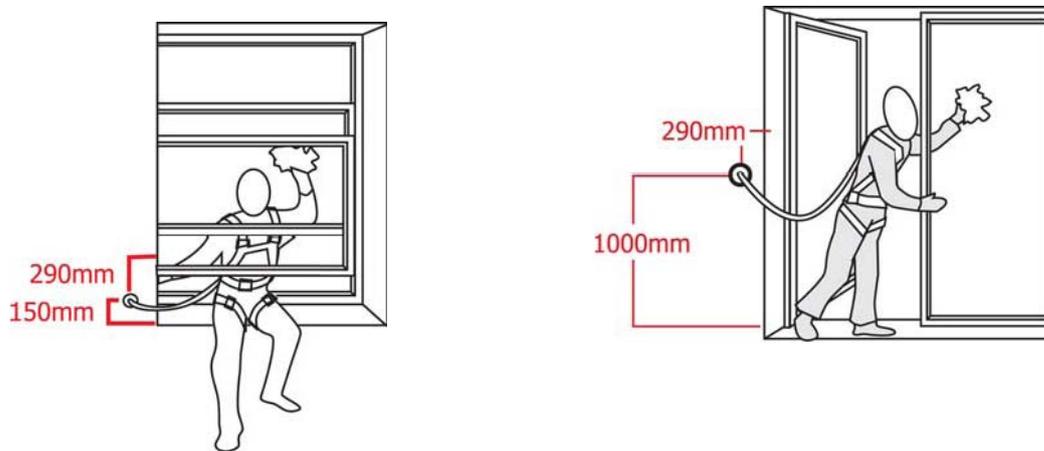
Instructions for use and for marking of devices

BS EN 795 requires the manufacturer to provide instructions for use which should be passed on to the building owner by the installer. The building owner is required to ensure that all users are familiar with these instructions and with equipment used in conjunction with anchor devices or systems. If necessary, warning signs on site should be provided.

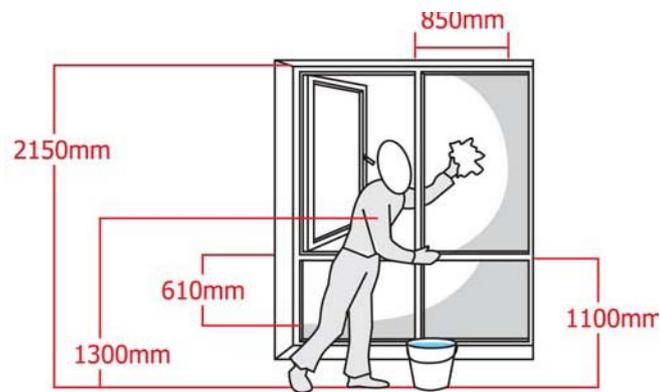
Labels should be provided for anchor devices to clearly show when the next examination of the device is due. These labels should also clearly state what the device is to be used for, e.g. "Fall Arrest Only" or "For work positioning and restraint."

These instructions for usage should also identify the potential dangers when the anchor devices are used in conjunction with either retractable types of fall arresters (BS EN 360) or energy absorbing lanyards (BS EN 355). Although these individual components might meet current standards, they will not have been tested as a complete fall arrest system.

EXAMPLES OF EYEBOLT POSITIONING



Maximum Reach Limits



This document is designed to provide an overview of some of the key recommendations in BS 7883:2005, particularly those relating to eyebolts. For more detailed information or to purchase a copy of the British Standard, please contact BSI Customer Services on Tel: 020 8996 9001, Fax: 020 8996 7001 or Email: orders@bsi-global.com . BS 7883:2005 can also be purchased from the BSI website: www.bsonline.bsi-global.com .