



# An introduction to BS7883:2019

Whitepaper



**WE KNOW WHAT'S AT STAKE.**

BS 7883:2019 was written and introduced to “raise the bar” of the industry as well as addressing legacy industry challenges.

The code of practice was published in November 2019 and retrospectively applies to all installations. Legacy installations can be conditionally passed to previous versions of the code of practice.



All installations need to be understood in sufficient detail and safe to remain in service. Part of the due diligence to establish the status of an installation is to review the System Technical File. This is of particular importance in the case of hidden elements [1].

As a code of practice, this British Standard takes the form of guidance and recommendations [2].

Since 1st March 2024, HCL Safety has been able to fully apply the latest revision of the standard. Many multi-faceted challenges have meant that the fall protection industry has taken longer to adapt to BS 7883:2019 than expected. HCL Safety has engaged with experts to ensure that we can work closely and pragmatically with duty holders to adopt the standard for their personal fall protection systems (PFPSs), finding efficient, reasonably practicable solutions that best fit each unique set of circumstances.



# Summary of changes

## Anchor system definitions

BS7883:2019 recognises five types of anchor systems, evolving from the previous classes [3]:

<b>TYPE A</b>	Anchor device with structural anchor
<b>TYPE B</b>	Anchor device without structural anchor
<b>TYPE C</b>	Horizontal flexible anchor line not deviating more than 15° from the horizontal
<b>TYPE D</b>	Horizontal rigid anchor line not deviating more than 15° from the horizontal
<b>TYPE E</b>	Anchor devices relying on mass and friction on a surface not more than 5° from the horizontal

## Categories of inspection results on anchor systems not conforming to BS 7883:2019

BS7883:2005 only allowed a PFPS to pass or fail. The new categories allow for the conditional passing and failing of systems that are mechanically safe and/or require a remediation to return them to safety, but lack documentation to bring them into full compliance with BS7883:2019:

	Pass	Conditional Pass	Conditional Fail	Fail
Satisfies all relevant recommendations of current standard or code of practice?	✓	✗	✗	✗
Satisfies all relevant recommendations of a previous standard or code of practice, but not those of the current?		✓	✓	✗
Safe to use? (Labelling follows accordingly.)	✓	✓	✗	✗
Safety concern can be remediated?			✓	✗
Can be returned to service post-remedial works?			✓	✗



## Requirements for documentation

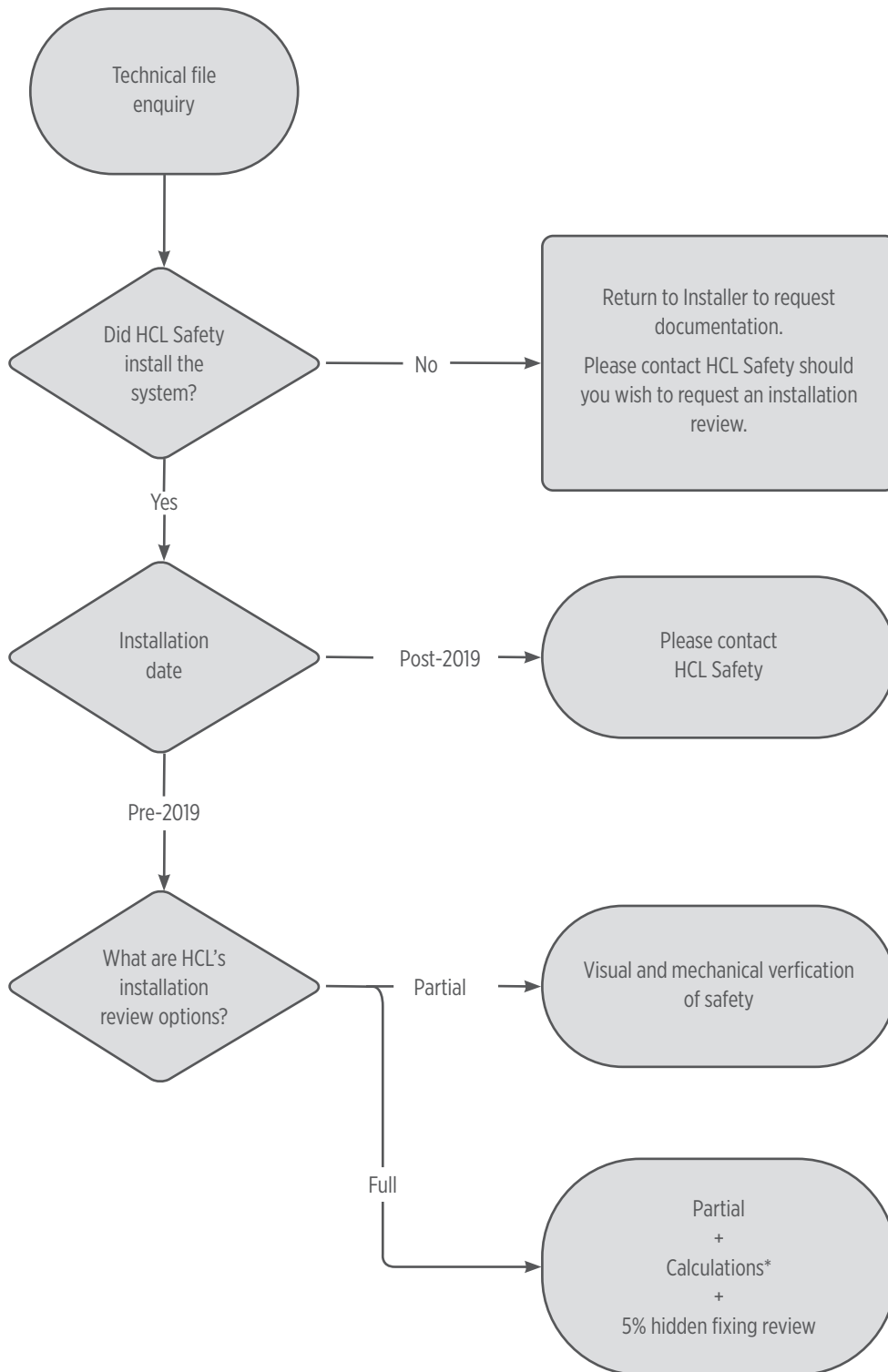
System technical file	Includes* project contact information, drawings, and design specifications, including those for hidden elements.
O&M manual	No change from previous definitions. Includes* user instructions, limitations of use, and safe systems of work.
Examination scheme	Includes* manufacturer inspection and frequency guides, including those for hidden elements.

*\*Not exhaustive*

**Note:** All documents should be compiled by the system designer and should be retained by the duty holder for the design life of the installed anchor system.



# Guidance for enquiries to HCL Safety



*\*HCL Safety provides loadings back to the end anchors of a system.*

## FAQs

### What is an installation review?

An installation review is the process where an inspector assesses an existing PFPS to ensure the anchor system and PFPE provide the desired level of safety and performance, including recommendations and requirements to the duty holder for any remedial work to be carried out. [4]

When there are no hidden elements in the PFPS, it is a non-intrusive process that allows us to verify that the design is safe before creating and issuing the relevant documents to the duty holder.

If the PFPS contains hidden elements, reverse-engineering will be required to verify PFPS compliance to BS7883:2019.

### What is reverse-engineering?

A reverse-engineering design check should take into account relevant standard(s) at the time of installation and any known subsequent information supplied by the manufacturer and industry guidance. [5]

Reverse-engineering should include the investigation and recording of hidden element samples (typically 5% with a minimum of 3), with passing samples permitting the supply of suitable documentation.

### What are HCL Safety's partial and full installation review options?

A partial installation review does not bring full compliance to BS 7883:2019. It is a visual and mechanical test verification in compliance with BS7883:2005. It is only suitable for PFPS installations prior to November 2019.

A full installation review is our recommended option, and can bring full compliance to BS7883:2019. It performs all partial installation review tasks, adding mechanical calculations of fall clearances and loadings transferred back to the anchorage substrate, and the visual and mechanical test verification of typically 5% (a minimum of 3) of any hidden elements.

### How can I find out more?

Further detail regarding inspection result categories and guidance for duty holders of those PFPS installations with missing or incomplete Technical Files can be found in the appendices of this document. For all other queries, please reach out to HCL Safety.



HCL Safety, an MSA Company  
Unit 9 Beeches Industrial Estate  
Yate  
BS37 5QT



0845 600 0086



HCL-info@MSAsafety.com

## Works Cited

[1] BSI Technical Committee PH/5 Personal Fall Protection, “BS 7883:2019 Personal fall protection equipment – Anchor systems – System design, installation and inspection – Code of practice,” Technical Bulletin Update, p. 1.

[2] The British Standards Institution, “BS 7883:2019 - Personal fall protection equipment – Anchor systems – System design, installation and inspection - Code of practice,” Foreword, p. V.

[3] The British Standards Institution, “BS 7883:2019 - Personal fall protection equipment – Anchor systems – System design, installation and inspection - Code of practice,” §3.3, pp. 4-11.

[4] The British Standards Institution, “BS 7883:2019 - Personal fall protection equipment – Anchor systems – System design, installation and inspection - Code of practice,” §3.26, p. 14.

[5] The British Standards Institution, “BS 7883:2019 - Personal fall protection equipment – Anchor systems – System design, installation and inspection - Code of practice,” Annex J, p. 120.

[6] The British Standards Institution, “BS 7883:2019 - Personal fall protection equipment – Anchor systems – System design, installation and inspection - Code of practice,” §12.2.6.3, p. 81.

[7] BSI Technical Committee PH/5 Personal Fall Protection, “BS 7883:2019 Personal fall protection equipment – Anchor systems – System design, installation and inspection – Code of practice,” Technical Bulletin Update, p. 3.

*Permission to reproduce extracts from British Standards is granted by BSI Standards Limited (BSI). No other use of this material is permitted. British Standards can be obtained from BSI Knowledge [knowledge.bsigroup.com](http://knowledge.bsigroup.com)*

# Appendices

## A1 - Categories of inspection results on anchor systems not conforming to BS 7883:2019 [6]

Result	Definitions
<b>Pass</b>	Satisfies all relevant recommendations and therefore can remain in service and be labelled as remaining in service.
<b>Conditional Pass</b>	Satisfies the recommendations of a previous standard or code of practice but does not meet all current recommendations in accordance with this British Standard but does not represent an immediate safety concern and should be labelled as remaining in service. An inspection report should be issued to the duty holder as soon as possible with recommendations for remedial works to be carried out to improve the anchor system and/or documentation within an appropriate timescale.
<b>Conditional Fail</b>	Satisfies the recommendations of a previous standard or code of practice but does not meet all current recommendations in accordance with this British Standard but does not represent an immediate safety concern which is capable of improvement. The anchor system and/or PFPE should be labelled as taken out of service, e.g. DO NOT USE, and, where possible, decommissioned to prevent use. An inspection report should be issued to the duty holder as soon as possible with requirements for remedial works that are to be carried out before the anchor system is re-inspected and returned to service.
<b>Fail</b>	Does not satisfy the recommendations of a previous standard or code of practice and does not meet the recommendations in accordance with this British Standard and represents an immediate safety concern which is beyond repair/improvement and should be labelled as taken out of service, e.g. "DO NOT USE", and, where possible, decommissioned to prevent use.



## A2 - Guidance for inspectors and duty holders in relation to the system status should the required information not be available [7]

As a minimum the system technical file should contain	Inspection status if not available
a. Preliminary information concerning the project and proposed installation.	Conditional Pass
b. Companies involved, setting out the relationship between duty holders, system designers, manufacturers, and installers.	Conditional Pass
c. Design considerations, including evaluation and calculation of connection structure/fall protection solution.	Conditional Fail
d. Record of decisions made based on the hierarchy of control measures.	Conditional Pass
e. Complete system design specification.	Conditional Fail
f. Documentation for traceability of products and items, including:	
1 Declarations of conformity	Conditional Pass
2 Delivery notes	Conditional Pass
3 Serial numbers and batch numbers	Conditional Pass
4 Date of manufacture	Conditional Pass
g. "As built" drawings showing the assembly of the complete installation.	Conditional Pass
h. Installation document(s) and photographs of installation signed by the installer, inspector and duty holder.	Conditional Pass
i. Details of any specification variations, e.g. where the fixing detail has been changed from that specified by the manufacturer.	Conditional Fail
j. Details of all hidden elements of the anchor system (e.g. where they are covered by roof coverings, cladding), and the method of fixing, documentation confirming this, including drawings and/or photographs.  Note:- In the absence of such information a robust process should be adopted to establish the integrity of the fixing method. Refer to Annex J of BS 7883.	Conditional Fail
k. Details and reports of any inspection(s) and tests completed.	Conditional Pass

Note: This Bulletin contains only a general description of the products shown. While product uses and performance capabilities are generally described, the products shall not, under any circumstances, be used by untrained or unqualified individuals. The products shall not be used until the product instructions/user manual, which contains detailed information concerning the proper use and care of the products, including any warnings or cautions, have been thoroughly read and understood. Specifications are subject to change without prior notice. MSA is a registered trademark of MSA Technology, LLC in the US, Europe, and other Countries. For all other trademarks visit <https://us.msasafety.com/Trademarks>.

MSA operates in over 40 countries worldwide. To find an MSA office near you, please visit [MSAsafety.com/offices](https://us.msasafety.com/offices).