

Specifying a cable-based fall protection system — key considerations

Q What standard should a horizontal cable system be tested to?

A A system should be tested to the relevant standards applicable to that region.

EN 795:2012

EN 795:1996 has now been withdrawn and replaced with EN 795:2012, which is supported by the technical specification CEN TS 16415:2013. The intention of this change, was to ensure consistent performance of anchor devices across Europe. EN 795:2012 specifies the requirements and test methods for single user fall protection anchor devices. Even if their intended use is restraint, anchor devices designated as such are now required to be also capable of fall arrest.

CEN TS 16415:2013 specifies requirements and test methods for anchor devices for use by more than one person simultaneously. As with EN 795:2012, even if their intended use is restraint, anchor devices designated as such are now required to be also capable of fall arrest. Test methods are based on two users falling simultaneously with a combined mass of 200 kg with additional users being tested using a 100 kg mass for each additional user.



EN 795:2012 test



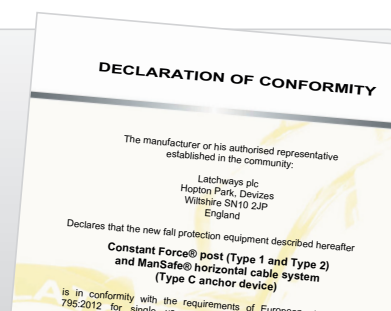
CEN TS 16415:2013

☒ The Latchways Constant Force post range has been tested and is compliant to both EN795:2012 and CEN TS 16415:2013.

Q How do you know a system is compliant?

A A system should be independently tested via a notified body and evidenced by a Declaration of Conformity Certificate.

☒ The Latchways Constant Force post has been independently tested by notified body SATRA, and Declaration of Conformity certificates can be provided on request.

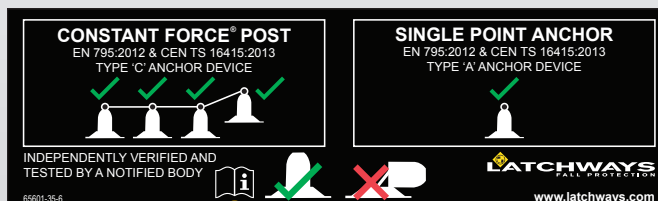


Q What markings should a compliant system carry?

A In accordance with EN 795: 2012, a system should be clearly marked to display the following information:

- 1 Means of identification, e.g. manufacturer's name, supplier's name, or trademark
- 2 Manufacturer's production batch or serial number or other means of traceability
- 3 Model and type/identification
- 4 Number and year of the document to which the equipment conforms
- 5 Pictogram or other method to indicate the necessity for users to read the instructions for use.

☒ The Latchways Constant Force post system carries all of these markings:



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Q Should a system be tested beyond the standard?

A Yes

As the world leaders in fall protection—and with an overarching importance on user safety—Latchways has always believed in testing not only to the standard but above and beyond it. Examples of the ways in which Latchways further test the Constant Force post systems are as follows:

✓ Representative Roof Testing

Latchways undertake extensive testing of complete and representative roofing systems.

This means that Latchways construct a 6 m x 6 m build-up of a roof, taking into consideration the supporting structure such as purlins, decks, spacer system, insulation and outer waterproofing covering. Testing in this manner ensures that Latchways can gain Manufacturer approvals for the Constant Force post to be installed on a specific roof type.

Latchways has now tested on over 500 roof types (with between 6 – 10 tests on each), each backed-up by Manufacturer Approval Letters. The manufacturer approval, ensures that the installation of a Constant Force post system will neither compromise the integrity of the roof, nor the guarantee given by the Roofing Manufacturer. With over 35 years' experience, Latchways has formed valuable partnerships with industry-leading roofing system manufacturers to ensure a holistic approach, and new relationships are formed on a regular basis.

✓ Dynamic performance testing (Stage 1)

This testing is conducted by using a 300 kg mass (the equivalent of three users falling simultaneously)—in excess of EN 795: 2012 and CEN TS 16415:2013—dropped through a free fall distance of 1.5 m, on a single post connected to a representative roofing system. This means that the Constant Force post system can accommodate up to three users connected at any one time working at any point along the length of the system, even within the same span.



✓ Static load testing (Stage 2)

For Latchways to determine an appropriate 'factor of safety', each Stage 1 test is subject to a static load held for a given period of time.

Where a Factor of Safety of 2 is required, the whole construction, including the Constant Force post must be able to withstand a static load equivalent to twice the working load achieved during Stage 1. In the case of the Constant Force post, 10 kN must be increased to 20 kN, held for three minutes, with no failure of the complete system. When all Stage 1 and Stage 2 tests have been successfully conducted the Constant Force post can be installed in a fall arrest application to the given roof construction.

Q What other performance related features should a fall protection system provide?

A Omni-directional performance

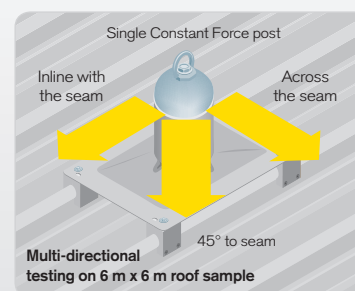
A system should be tested to ensure that, in the event of a fall, it can still perform no matter in which direction the user falls.

✓ The Constant Force post is tested to ensure it can deploy in any direction—it is able to achieve this using the technology of the unique Constant Force energy absorber.

A Corrosion testing

To ensure durability of a system, it should be subjected to recognised accelerated corrosion testing regimes. During this testing, a system should be able to show its corrosion resistance in conditions that could normally be expected in service, i.e. urban, rural, coastal and general industrial applications.

✓ The Constant Force post (and accompanying componentry) has been tested to 1000 hours of Acetic Salt Spray in accordance with BS EN ISO 9227:2006 and Neutral Salt Spray in accordance with ASTM B117-03.



Specifying a Latchways System

Q What additional benefits are there to specifying a Latchways system?

A Materials and Inspection

Latchways use 316 marine grade stainless steel (higher corrosion resistance than standard 304 stainless steel), coated aluminium alloys, and 17/4 PH for critical cast components. All parts are individually inspected, and critical castings are subject to X-ray inspection and either dye-penetrant or magnetic particle analysis. As an ISO 9001 accredited company, quality is central to all design and manufacturing procedures and is embedded into every aspect of the Latchways business process.

A Range

With a range of over 70 baseplates already available, and a complete testing regime in place to accommodate for new and revised roof constructions, Latchways is well positioned to offer an extensive range of compatible rooftop fall protection solutions.

A Recyclability

As an ISO 14001 accredited company, Latchways understands the importance of using products that can be recycled whilst offering long-term durability. By using aluminium and marine grade stainless steel for the manufacture of the main constituent parts, this is achievable with the Constant Force post (the Latchways Constant Force post is 100% recyclable).

Q How do I know my Latchways system will be installed correctly?

A The network of Latchways registered installers is fundamental to the successful design, installation, and inspection of any Constant Force post system.

Latchways Registered Installers are exclusive to Latchways and specialise ONLY in Latchways fall protection systems; furthermore Latchways Constant Force post systems can only be installed by a Latchways registered installer. Whilst this not only ensures that the quality of installation is maintained, it also gives the customer confidence that the system will have been installed by a company who has been correctly trained by Latchways.

Q How will the purchase of a system benefit my organisation?

A It is important for an organisation to consider the long-term benefits of choosing a Latchways system; the procurement of a Latchways system should be considered as an investment. Whilst there is obviously an initial outlay of capital required, a Constant Force post system can actually benefit an organisation as it then becomes included within their asset register, and can often increase the value of a building. Latchways can also offer a range of maintenance packages for the system—through their Registered Installer network—ensuring that the product is not only safe-to-use, but that it's lifespan is ensured through regular inspection.