

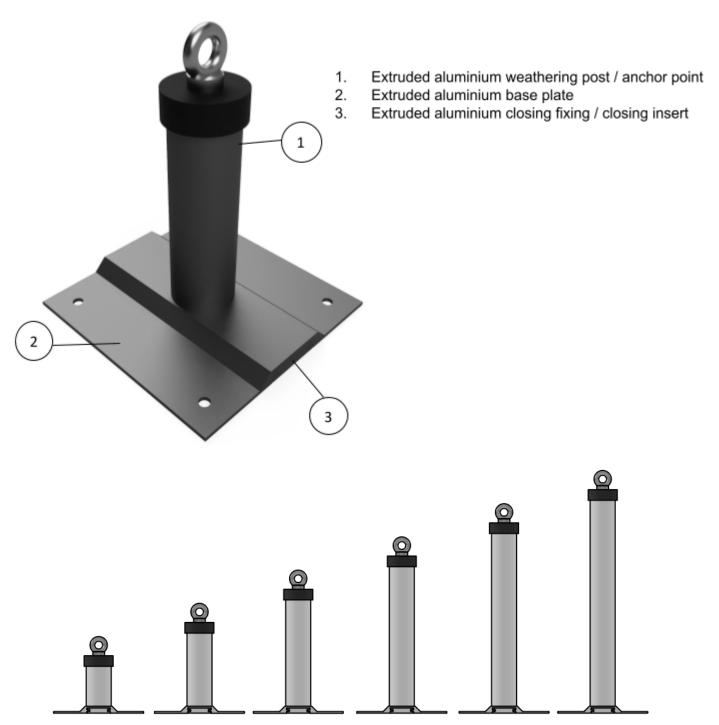
Operating Manual

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Product Overview

The Working At Height 2005 Act necessitates a safe system of work at height for maintenance of all buildings. Fallsecure[™] horizontal safety line post is designed for fall restraint and arrest, to comply with EN795:2012, PD CEN/TS 16415:2013 type A & C and BS8610:2017 with posts of varying height to suit all applications.



Operation

- Ensure that operation instructions have been read and fully understood prior to commencing work with Fallsecure[™] horizontal safety line post system.
- Fallsecure[™] post is designed for 3 users with a safe working load of 300kg for Concrete systems.
- Fallsecure[™] post is designed for 2 users with a safe working load of 200kg for Profiled Metal / Ply roof systems.
- Fallsecure[™] post is rated to 15kN BS8610-2017.
- Users of Fallsecure[™] must be trained in the safe use of the system.
- Periodic inspection and maintenance is required for Fallsecure[™] horizontal safety line system. It must not be used if it has an overdue service date.
- Equipment to be used with this system must be certified to EN795:2012, PD CEN/TS 16415 and BS8610:2017.
- The system, its components and the structure to which it is attached to must be inspected for signs of deterioration and deformation prior to use. It must not be used if deterioration and deformation are present.
- Ensure that fixings and components are securely fastened. Any adjustments required will need to be performed by a height safety inspector.
- Do not tamper with, modify or remove any part of this system unless authorised by Sayfa Group or the original Designer / Installer.

Safe Use & Maintenance

- Please note the Operation requirement for Safe Use.
- Fallsecure[™] concrete posts are designed for 3 users with a safe working load of 300Kg.
- Fallsecure[™] profiled metal roof posts / brackets are designed for 2 users with a safe working load of 200 Kg .
- FallSecure various in structural testing limits / rating dependent on system and substrate
 Fallsecure[™] is rated to 15kN (BS8610-2017 Type A) Concrete
 Fallsecure[™] is rated to 16.8kN (BS8610-2017 Type C) Concrete
 Fallsecure[™] is rated to 12kN (EN795:2012 Type A) PMR
 Fallsecure[™] is rated to 13kN (EN795:2012 Type C) PMR
- It is recommended the system is designed in 'restraint'. Prior to the system being used, a rescue plan must be in place for 'arrest'.
- FallSecure[™] posts are essentially maintenance free
- FallSecure Line installations can become slack due natural variations temperature and humidity.
- Fallsecure[™] must not be used if it is damaged or arrest has occurred. Before it can be used again, it must be checked and recertified by a competent person.

All components, fixings and fittings must be secured. Tightening, adjustment or replacements must be carried out by a competent person.

EN ISO 12944-2 C4 – C5 Environments : Intervals of 6 months*.

*For these environments please contact Sayfa group for product finishing options enquiries@sayfagroup.co.uk

Please contact Sayfa Group for Inspection Plan cost or view approved contractors at <u>www.sayfagroup.co.uk</u>

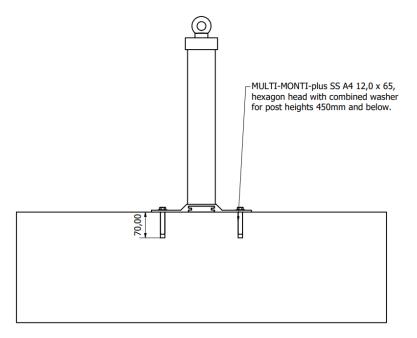
Installation guide

Fallsecure[™] post is available in varying heights from 150mm through 650mm. For installation, M10 or M8 drill bits of varying lengths will be required depending on the depth which is required to be drilled based on what post is being used. The M12 fixings will require 15mm torque wrench sockets and it is recommended that the maximum power output of impact screw drivers be limited to 250 Nm.

For profiled metal roofs, the posts are installed above the roof using structural bulb type rivets which are integrated with a neoprene seal. A sealing strip is used between the roof and post during installation, this provides protection against leaks. Each post must be fixed using 12 rivets.

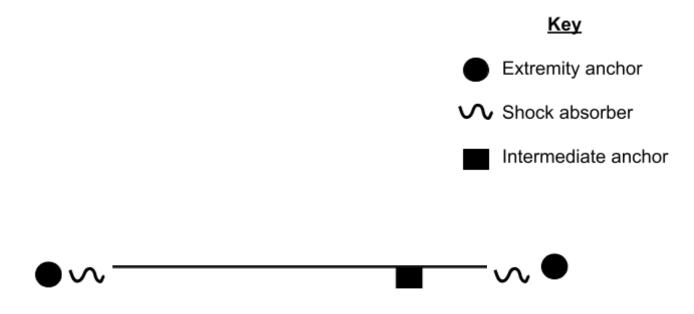
For flat roofs, the posts are installed above the roof using toggle fixings which penetrate the insulation, membrane and roof substrate which could be a plywood or steel deck. The toggles are then fixed from the top of the roof, no access is required underneath.

Post heights below 250-650mm fixed to concrete



Set Up and Assembly

If Fallsecure[™] post is utilised as a horizontal lifeline, It is recommended that it is assembled as follows. Including Fallsecure[™] posts, the other components which will make up an assembly are post brackets, intermediate post brackets, corner brackets, multi-end brackets, Inline shock absorber, Inline tensioners, and Inline forks.



14m max span. 2 Shock absorbers for BS810:2017 systems with corners.

The maximum permissible span between each anchor is 14 metres. When working with this system there must be a minimum clearance of 2.5 metres from the fall edge, as illustrated in figure 3. When swaging, a mark must be made on the stainless steel wire at the end of the fork once the wire has been inserted in the fork. If the wire moves during the swaging process, it will be evident.

A minimum of 4 swages should be applied to each fork-end. when tensioning the wire, it must be taut, but not too tight. Each safety line must be inspected every 12 months and tested. When used as a safetyline there is a limit of 3 users per system for concrete systems and 2 users per system for systems to profiled metal roofs. It is important to position the line behind the user.

Maintenance

Fallsecure[™] post must be assessed and recertified by a height safety inspector at intervals of 12 months. For corrosive and harsh environments, more frequent inspections may be required, or intervals of 6 months at the recommendation of the system Designer / Installer.

Fallsecure[™] posts must be cleaned using a damp or dry cloth. Chemicals which can damage its components must never be used.

If there is evidence of deterioration or deformation due to overloading of the system, then it must be reported to a responsible person.

A record of inspections must be kept up to date.

The following checklist outlines the criteria for ensuring the safe use of the system. The system must be maintained by a height safety inspector.

Component	Inspection criteria	Pass Y/N	Action taken	Date
	Bracket choice Inspect the bracket of choice and ensure that there is no deterioration or deformation due overloading of the system. For example if an eyebolt is used, There must not be elongation of the part. there must not be deterioration of intermediate or brackets.			
	Post Inspect the post and ensure that there is no deterioration or deformation due to overloading.			

Base Inspect the base and ensure that there is no deterioration or deformation of the component due to overloading of the system. Ensure that there is no elongation of the fixing holes.		
Weathering plate Ensure that there is no deterioration, elongation and deformation of the part due to overloading of the system.		
Inline shock absorber if energy absorbers are utilised, each one must be checked for signs of deterioration. If there are signs of moderate elongation and deformation, it must not be used.		

THE PARTY OF THE P	Certification label Ensure that information is clearly identifiable. Installer details and install date must be present on the label. (EXAMPLE ONLY, PLEASE SEE sayfagroup.co.uk for approved Installation)		
	Line (8mm) Swage connection performed by the Installer should be tested to 12kN for 3 mins. If the line has become slack, this must be visually taut.		

Technical Specification

Fallsecure[™] post, comprising multiple bracket options, is available in heights of 150mm, 250mm, 350mm, 450mm, 550mm and 650mm for concrete fixed systems. Profiled metal roofs are 150mm. Single ply roof are 150mm, 250mm and 350mm. It is designed in compliance with EN795:2012, PD CEN/TS 16415:2013 type A & C and BS8610:2017.

Features

Multiple bracket options

Enables systems to be configured using a wide range of posts utilising different brackets. Available brackets include End post brackets, Intermediate post brackets, Corner brackets and Multi-end brackets.

Installation methods

Fischer resin is utilised along with stainless steel studs for concrete with project specific calculations.

The FallSecure system has been tested with Concrete Anchors A4 12,0 x 65 across the range '270'. These are concrete anchor screws which do not require chemical bonding agents. The reinforced toothing on the screw tip cuts an internal thread in the material during insertion. This creates a positive locking connection, which is subsequently used for the anchoring.

The profiled metal systems are tested with 7.7mm x 27mm large flange compression washers. EPDM washers can be used and are available with the rivets from Sayfa Group.

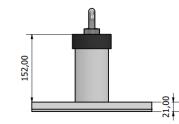
The FallSecure system can also be installed with CLT Anchors and Toggles.

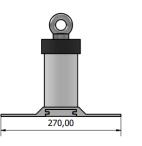
Rating FSL.0270 Range - 15kN three user. 300kg safe working load. FSL.0325 / FSL.0360 / FSL.0425 Range - 13kN 2 User. 200kg safe working load. FSL.0720 - 15kN 2 User. 200kg safe working load.

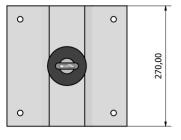
Dimensions

150mm height

Code: FSL-0270-0150-2U Width: 270mm Height: 150mm System weight: 2 Kg Rating: 13KN Safe working load: 125 KG

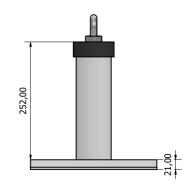


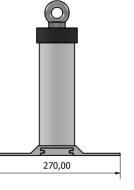


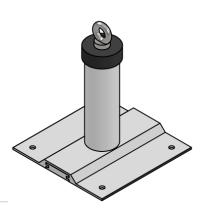


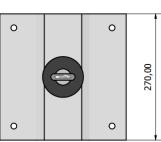
250mm height

Code: FSL-0270-0250-3U Width: 270mm Height: 250mm System weight: 2.4 Kg Rating: 15KN Safe working load: 300 KG





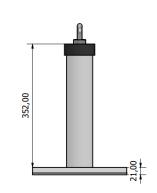


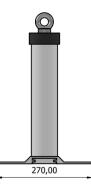


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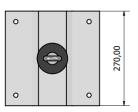
350mm height

Code: FSL-0270-0350-3U Width: 270mm Height: 350mm System weight: 2.8 Kg Rating: 15KN Safe working load: 300 KG



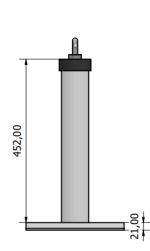


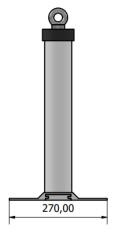


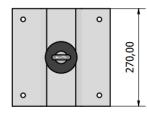


450mm height

Code: FSL-0270-0450-3U Width: 270mm Height: 450mm System weight: 3.2 Kg Rating: 15KN Safe working load: 300 KG



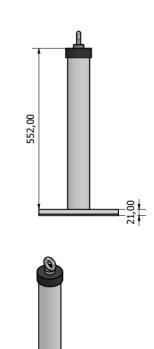


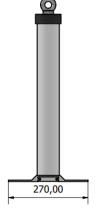


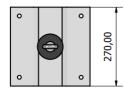
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550mm height

Code: FSL-0270-0550-3U Width: 270mm Height: 550mm System weight: 3.6 Kg Rating: 15KN Safe working load: 300 KG

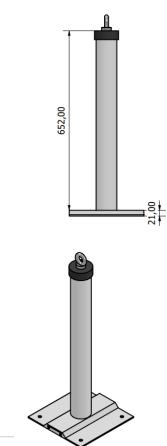


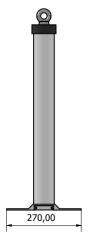


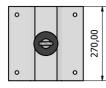


650mm height

Code: FSL-0270-0650-2U Width: 270mm Height: 650mm System weight: 4 Kg Rating: 15KN Safe working load: 300 KG









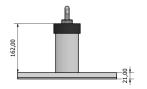
FSL.0325 Roof Types Fixing with 8 Rivet for BS8610:2017 C1, 12 Rivets for BS8610:2017 C2 / EN795:2012

Euroclad MW5R - Aluminium Euroclad32/1000 Forward - aluminium EurocladMW5RS Forward - Aluminium EurocladTrapezoidal Liner 19/1000 TATA Trisobuild Acoustic Systems TATA Trisobuild R32 profile TATA Trisobuild R35 profile TATA Trisobuild R46 profile TATA RoofDek D46

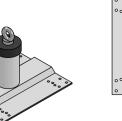
- 200mm centres
- 167mm centres
- 200mm centres
- 167mm centres
- 300mm centres
- 200mm centres
- 150mm centres
- 225mm centres
- 225mm centres

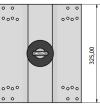
150mm height -Code: FSL-0325-0150-2U Width: 325mm Height: 150mm System weight: 3.1 Kg Rating: 13KN

Safe working load: 200 KG







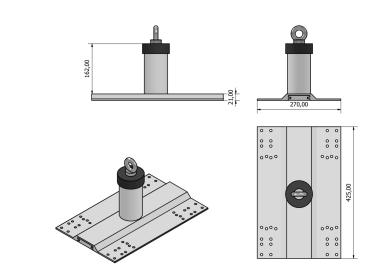


FSL.0425 Roof Types Fixing with 8 Rivet for BS8610:2017 C1, 12 Rivets for BS8610:2017 C2 / EN795:2012

TATA RoofDek D200 - 360mm centres

150mm height

Code: FSL-0425-0150-2U Width: 425mm Height: 150mm System weight: 3.9 Kg Rating: 13KN Safe working load: 200 KG

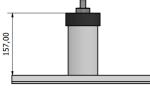


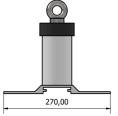
FSL.0360/720 Roof Types Fixing with 8 Rivet for BS8610:2017 C1, 12 Rivets for BS8610:2017 C2 / EN795:2012

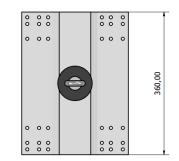
KingSpan - 360mm centres

150mm height

Code: FSL-0360-0150-2U Width: 360mm Height: 150mm System weight: 3.4 Kg Rating: 13KN Safe working load: 200 KG

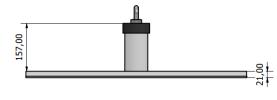


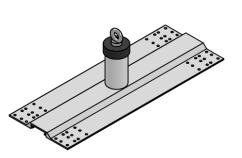


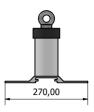


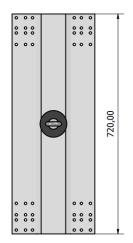
150mm height

Code: FSL-0720-0150-2U Width: 360mm Height: 150mm System weight: 3.4 Kg Rating: 13KN Safe working load: 200 KG



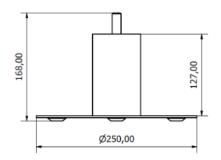


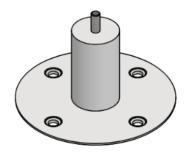


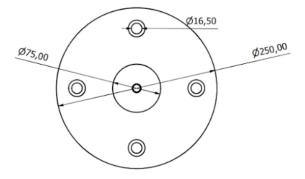


150mm height - membrane roof pvc coated

Code: FSL-0250-0150-2U Width: 250mm Height: 150mm System weight: 3.4 Kg Rating: 13KN Safe working load: 200 KG







System Configurations

EPB.0000.SS "End Post Bracket"





IPB.0001.SS "Intermediate Post Bracket"

CPB.0001.SS "Corner Post Bracket"



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MPB.0001.SS "Multi End Post Bracket"



SPB.0001.SS "Stop Start"

LTP.0000.SS "Line Traveller"



Material specification

A4/1.4401 A70 Grade M16 Eye Bolts

A4/1.4401 A70 Grade M16 Bolts

6082-T6 Structural Aluminium Post, base and weathering.

Installation / fixings

Proprietary Concrete A4 Stainless Steel Anchors M12 anchors 95mm

Stainless or BZP steel studs and Chemical Anchor M12 anchors

Propriety toggle fixings M8

Propriety 7.7mm structural rivets for profiled metal roofs

Test standards

-BS EN 795 Personal fall protection equipment. Anchor devices.

-PD CEN/TS 16415:2013 type A & C Personal fall protection equipment. Anchor devices. Recommendations for anchor devices for use by more than one person simultaneously. -BS 8610 Personal fall protection equipment. Anchor systems.

Related standards

- BS 7883 Code of practice for the design, selection, installation, use and maintenance of anchor devices conforming to BS EN 795.

- BS 7985 Code of practice for the use of rope access methods for industrial purposes.

- BS ISO 22846 Personal equipment for protection against falls.

- BS 8437 Code of practice for selection, use and maintenance of personal fall protection systems and equipment for use in the Workplace.

Testing

Testing and performance are in accordance with BS EN 795:2012 Personal fall protection equipment, PD CEN/TS 16415:2013 type A & C Personal fall protection equipment, and BS 8610:2017 Personal fall protection equipment.

Product warranty

15 Years Standard Warranty

30 Years SAYFA+ Warranty

Please refer to the Warranty Application available on www.sayfagroup.co.uk



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