



EDGEREIL™ A FRAME DAVIT SYSTEM

Operating Manual

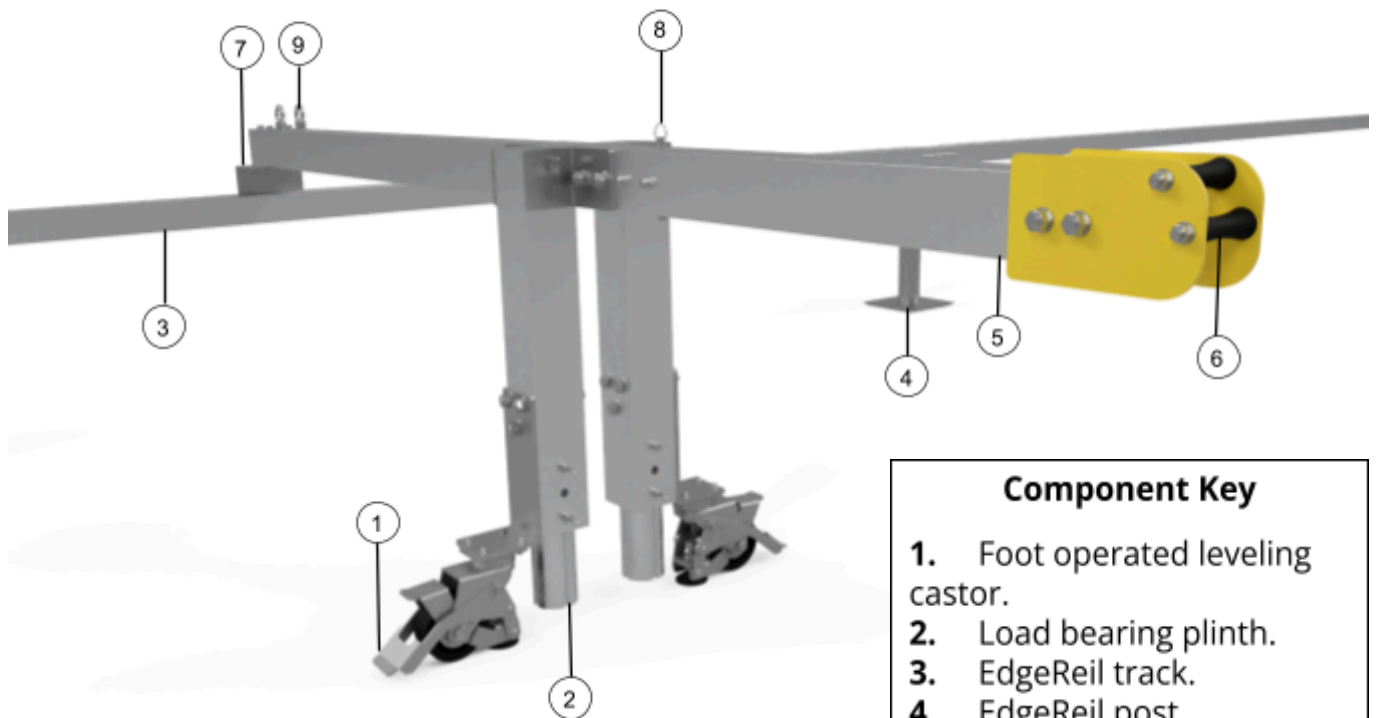
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Product Overview

The EdgeReil Twin Track Davit is designed for lifting and lowering personnel and materials, tested to BS8610:2017 as a Type A / D product and meeting the requirements of BS7883:2019.

The main purpose of this product is to reduce the time and personnel associated with a rope access clean operation as well as increase user and public safety by reducing the frequency of rigging and amount of manual handling.



Component Key

1. Foot operated leveling castor.
2. Load bearing plinth.
3. EdgeReil track.
4. EdgeReil post.
5. Removable davit boom.
6. Roller.
7. EdgeReil trolley.
8. Quick release pin.
9. Rigging anchor.

Operation

- Ensure that operation instructions have been read and fully understood prior to commencing work with the Davit arm.
- Parapet mounted EdgeReil Davit™ is designed for 2 user with a safe working limit of 100Kg each.
- The system is suitable for 2 User Design principles with Type 4 - 7 possible from the 6m fixing centre points
- Parapet mounted EdgeReil Davit™ is designed with a safe working limit of 600kg for materials lifting or lowering.
- EdgeReil Davit™ is not to be used during severe weather conditions. It must not be used when wind conditions are greater than 23mph.
- EdgeReil Davit™ is rated to 15kN and 21kN BS8610-2017.
- The Supervisor operators of the system must have a minimum level 3 IRATA qualification for rope access systems.
- Operators of the EdgeReil davit system should be IRATA level 1 or 2 qualified but must be competent and experienced. They should be trained in the safe use of the system with appropriate rescue plans.
- Periodic inspection and maintenance is required for EdgeReil™ Davit. It must not be used if it has an overdue service date.
- 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.

- If the system has been damaged or arrest has occurred due to a fall, ensure that it is not used again until it has been inspected and recertified.
- Ensure that fixings and components are securely fastened. Any adjustments required will need to be performed by a height safety inspector.
- Should rope lines pass over an edge, then rope protectors must be used.
- There must always be 2 people during the operation of the system. In the event of an emergency, one person can provide rescue assistance and first aid.
- Do not tamper with, modify or remove any part of this system unless authorised by Sayfa Group.

Safe Use & Maintenance

- EdgeReil Davit is are 316 grade polished stainless steel and 6082 anodised aluminium, providing a minimum 30 years service life in most environments. Any powder coating is for aesthetic or identification purposes only.
- EdgeReil Track is manufactured 6082 mill finish aluminium as standard, providing a minimum 30 years service life in most environments. Any powder coating is for aesthetic or identification purposes only.
- The traveller and bearing assembly are rubber sealed A2 stainless steel. These do not need lubrication during there service life.
- The service life of the bearings is dependent on the track orientation, environmental conditions, primary application and frequency of use. These should be dismantled on site for inspect between 3 - 5 year intervals and returned to Sayfa Group for bearing replacement every 5 - 10 years.
- Please refer to our LOLER guidance for further testing / recertification guidance.
- Recertification of this system is required to be performed by a LOLER competent, our recommendation by a LEEA or WAHSA member company. The recommended intervals for the conditions below:
 - EN ISO 12944-2 C1 – C3 Environments : Intervals of 6 months
 - EN ISO 12944-2 C4 – C5 Environments : Intervals of 3 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 www.sayfagroup.co.uk

Quick Assembly Guide

Step 1

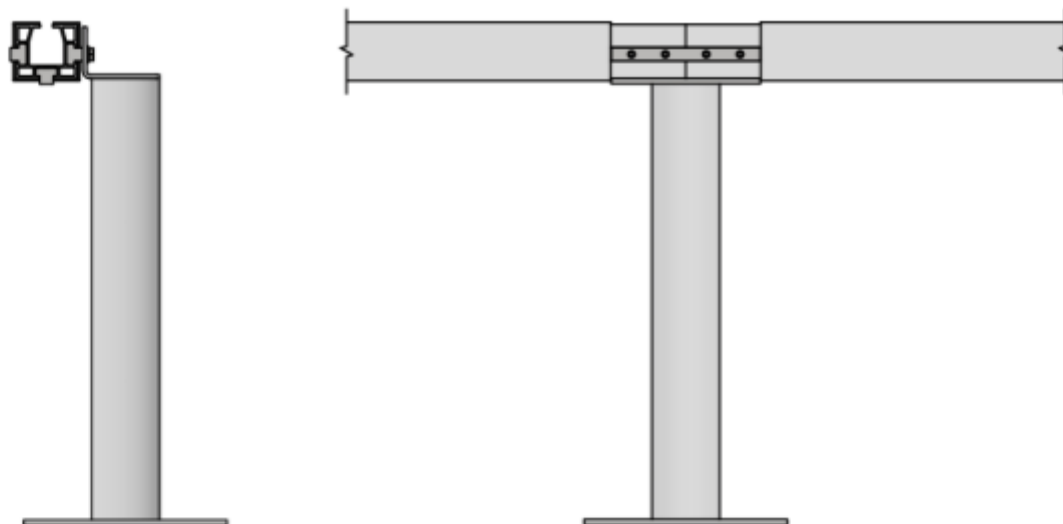
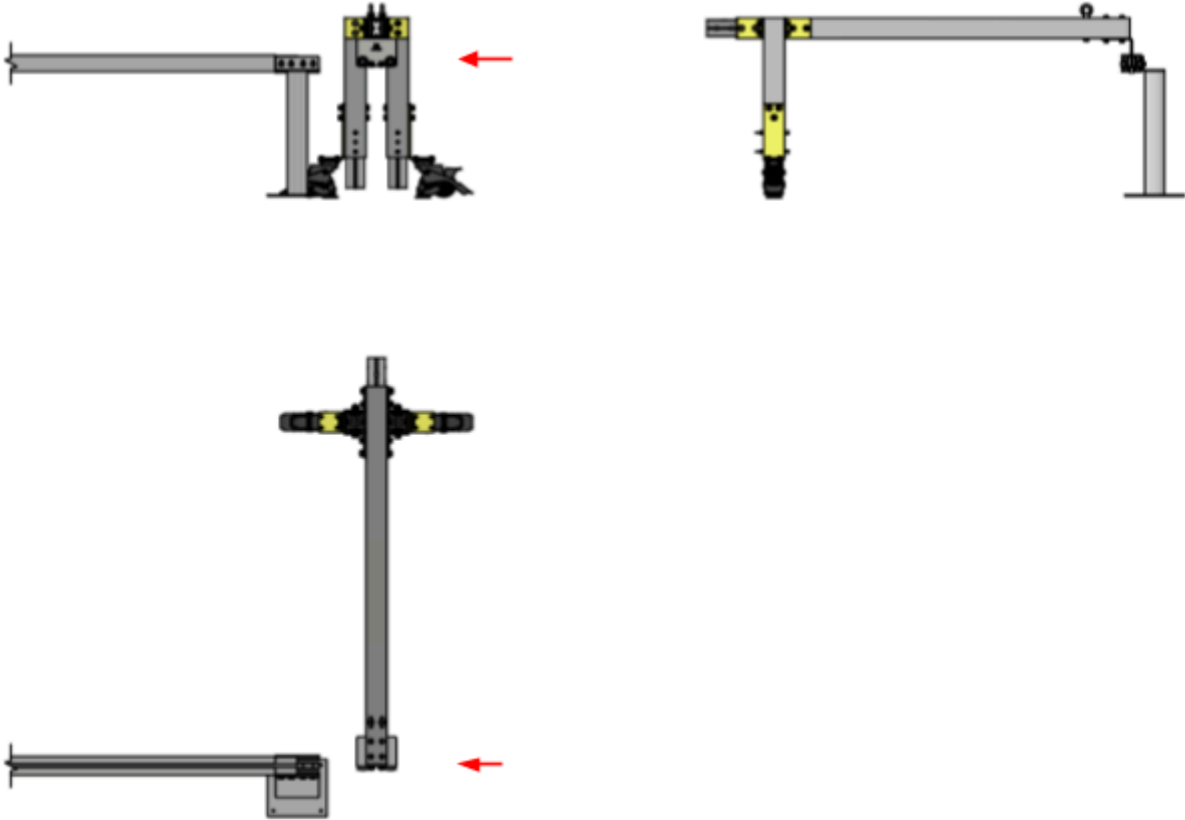
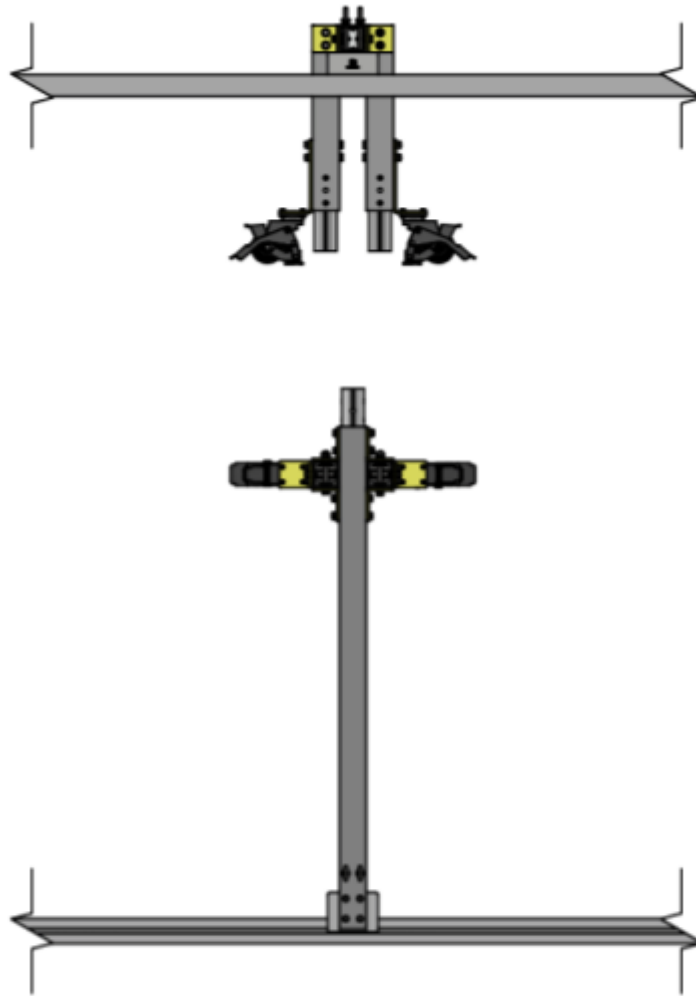


Figure 2

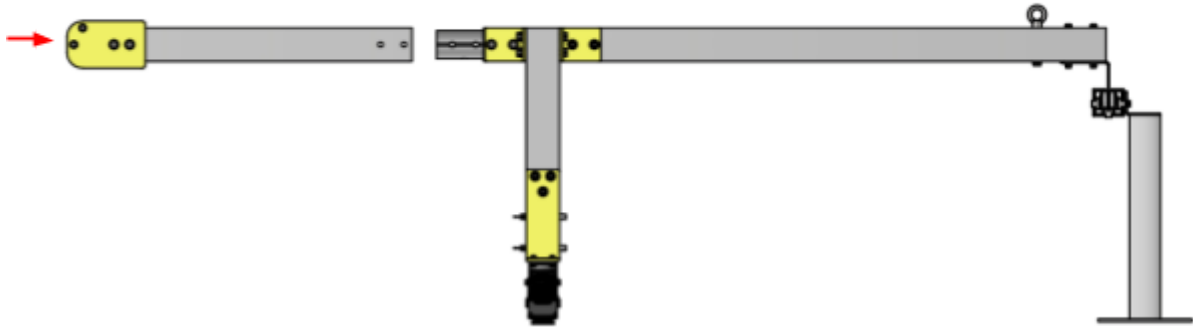
Ensure that all fixing on the rail and brackets are securely fastened. This includes grub screws fastened into any track joining pieces and bolts which have been used to fasten the brackets and T-nuts together. Ensure that there is no play or movement from the T-nuts.

Step 2**Figure 3**

Slide the trolley into the rail, as illustrated in figure 2.

Step 3**Figure 4**

Once the A-frame davit has been pushed along the track. Ensure that rail end stops have been inserted and there is full deployment if using quick release pins.

Step 4**Figure 5**

Slot the boom onto the front of the A-frame davit, using the grooves of the circular section to guide it into place and align the corresponding fixing holes.

Step 5

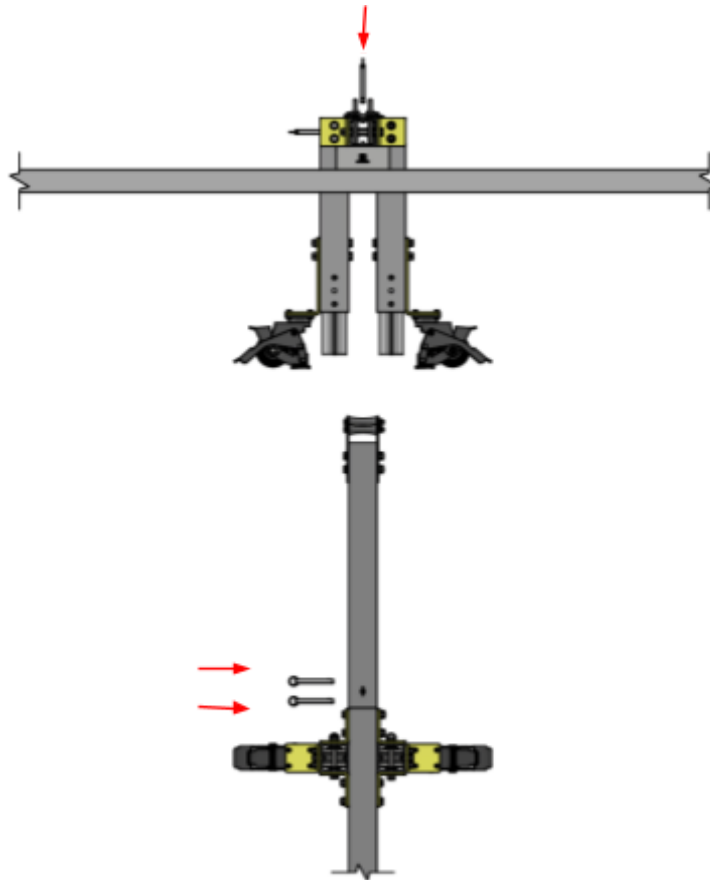


Figure 6

Once the boom is in place, insert 2 quick release pins through the side of the boom, and 1 quick release pin through the top. Ensure that quick release pins have deployed.

Step 6

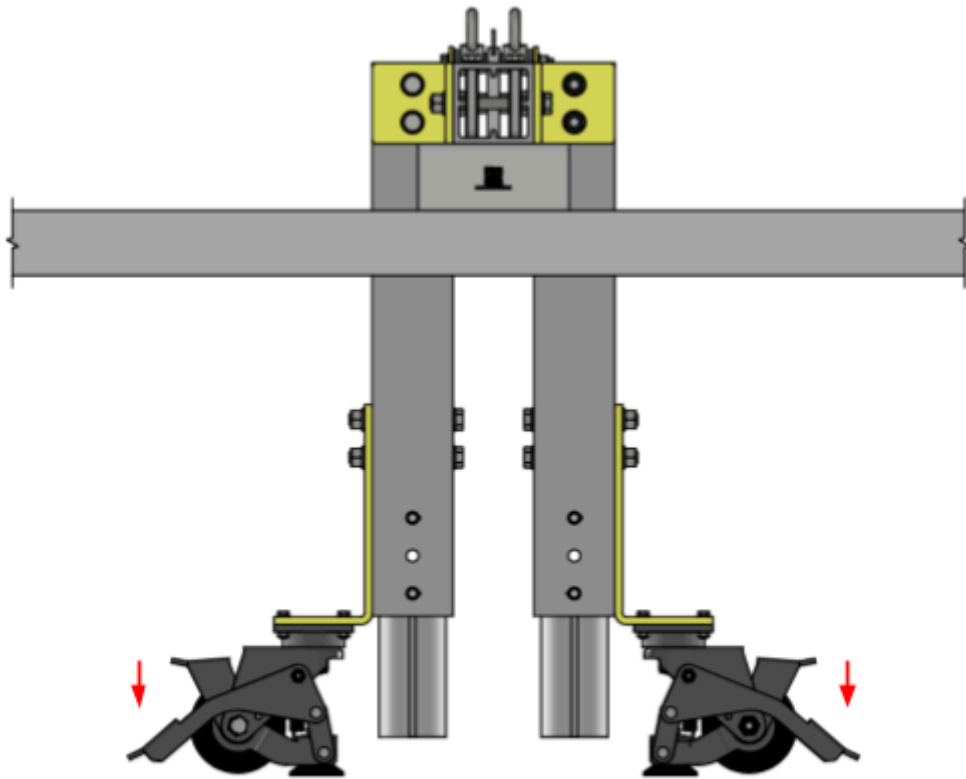
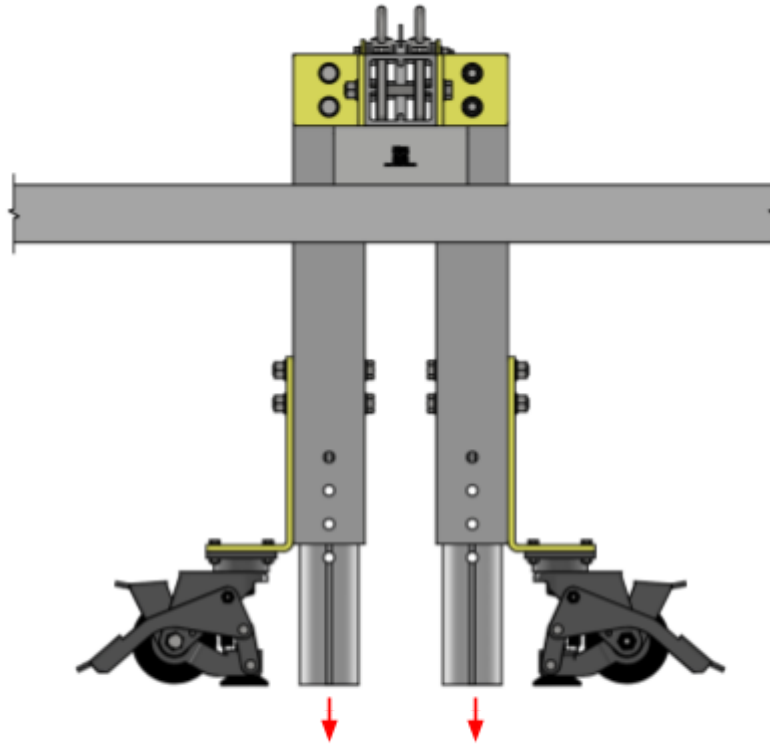
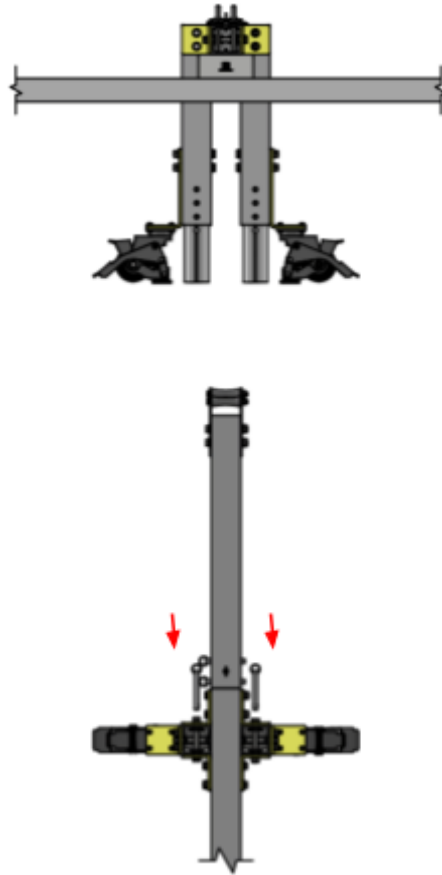


Figure 7

With the boom now ready, move the A-frame davit to the location required. Apply the brakes by stepping down onto the castor lever, as illustrated in Figure 7.

Step 7**Figure 8**

Once the brakes have been applied, remove the quick release pins from the load bearing plinth so that they drop to the ground.

Step 8**Figure 9**

Once the load bearing plinths are in place, re-insert the quick release pins and ensure that the detent balls are deployed.

Set Up & Operation

Step 1

Please note the system is designed so that the shoulder can be installed permanently or, for aesthetic purposes removed. If this is removed please refer to the instructions above and specifically figure 5.

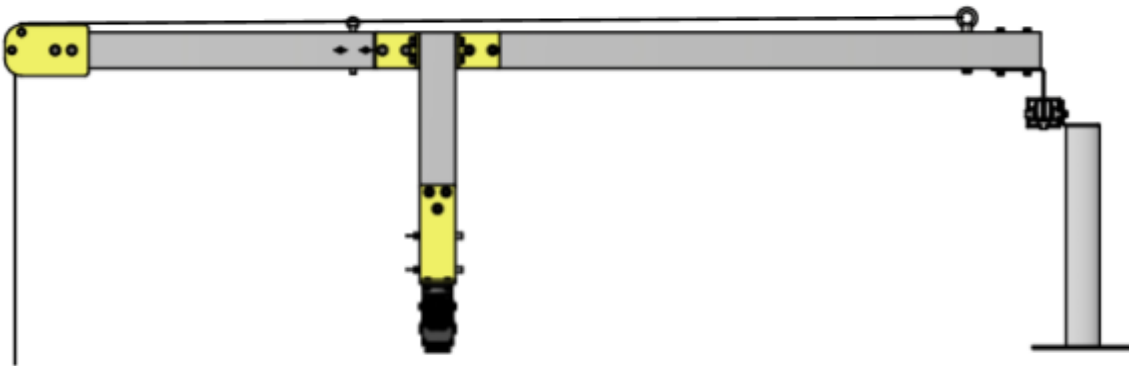


Figure 10

A final check must be performed on fixings before use. Ensure that the detent ball pins are deployed, and that the bolts and eye-nuts have been securely fastened, including all carabiners.

Figure 10 illustrates the correct rope path and rigging of the system. The rope must be attached to both eye bolts at the rear of the davit. It must then run over the top of the davit, and in between the two rollers.

Maintenance schedule

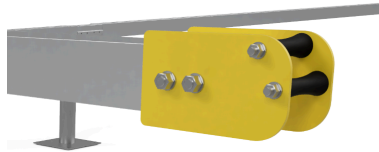
EdgeReil Davit™ must be assessed and re-certified by a Competent person as defined under the Lifting Operations and Lifting Equipment Regulations 1998 and BS7883:2019, at intervals of no more than 6 months.



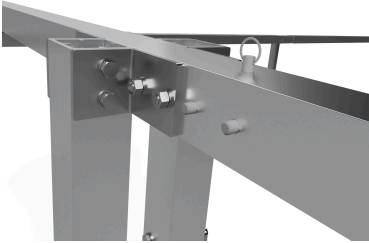
If there is evidence of deterioration or deformation due to overloading of the system, then it must be reported to the responsible person.


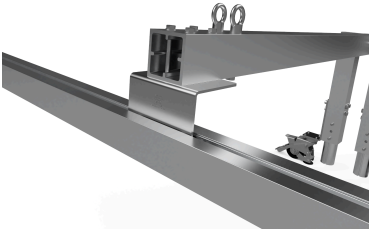
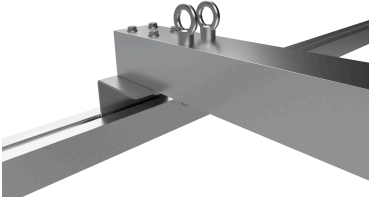
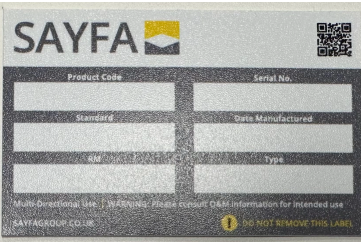
EdgeReil Davit™ must be cleaned using a damp or dry cloth. Chemicals which can damage its components must never be used.

A record of inspections must be kept up to date.

The following checklist outlines the criteria for ensuring the safe use of the davit system, this is not exhaustive the discretion of the Competent person must be used.

Component	Inspection criteria	Pass Y/N	Action taken	Date
	<p>Rollers Ensure that the rollers function correctly. Ensure that there is no deterioration or deformation of the fixings and plates, due to overloading of the system.</p>			

	<p>Load bearing plinth</p> <p>Ensure that there is no deterioration or deformation due to overloading of the system.</p> <p>Ensure that there is correct interaction with the teeth of the box section and the quick release pins.</p>			
	<p>Quick release pin</p> <p>Inspect the quick release pin and ensure that there is no deformation or deterioration due to arrest or overloading of the system.</p> <p>Ensure that the detent ball is not damaged and functions correctly.</p>			
	<p>Brackets</p> <p>Ensure that there is no deterioration and deformation of the brackets and its fixings due to overloading of the system. Ensure that the fixings are securely fastened.</p>			

	<p>Edgereil post</p> <p>Ensure that there is no deterioration and deformation of the post. The square plate, tube, brackets and the welds must be inspected.</p> <p>Ensure that the fixings are securely fastened.</p>			
	<p>EdgeReil trolley</p> <p>Ensure that there is no deterioration and deformation of the trolley plate due to overloading of the system. Ensure that the bearings function correctly and that the trolley moves freely.</p>			
	<p>Rigging anchor</p> <p>Ensure that there is no deterioration and deformation of both eye bolts due to overloading of the system.</p>			
	<p>Certification label</p> <p>Ensure that information is clearly identifiable.</p>			

	<p>Fixing Nuts & Bolt Torque test all Nuts & Bolt to Pre-Load levels determined by ISO898-2:2013.</p>			
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Technical Specification

All EdgeReil systems are manufactured from 6082-T6 structural aluminium, 316 grade stainless steel and A4-80 grade fixings. Finishing options include AA-20 anodising or polyester powder coating.

Features

Locking pin- Facilitates rapid assembly and disassembly of the Davit whilst providing a secured assembly.

Dimensions

Code: ERD.3500.0500.2U

Width: 967mm

Height: 508mm

Code: ERD.3500.1000.2U

Width: 967mm

Height: 1008mm

Code: ERD.3500.1000.2U

Width: 967mm

Height: 1508mm

Unit weight

A-Frame davit with boom: 97 Kg

A-Frame davit without boom: 83 Kg

Load Rating

Design Load: 21kN

Working Load: 2 User (200 Kg)

Service Load: 600kg

Safe working load 'SWL': 600 kg

Unit weight

A-Frame davit with boom: 97 Kg

A-Frame davit without boom: 83 Kg

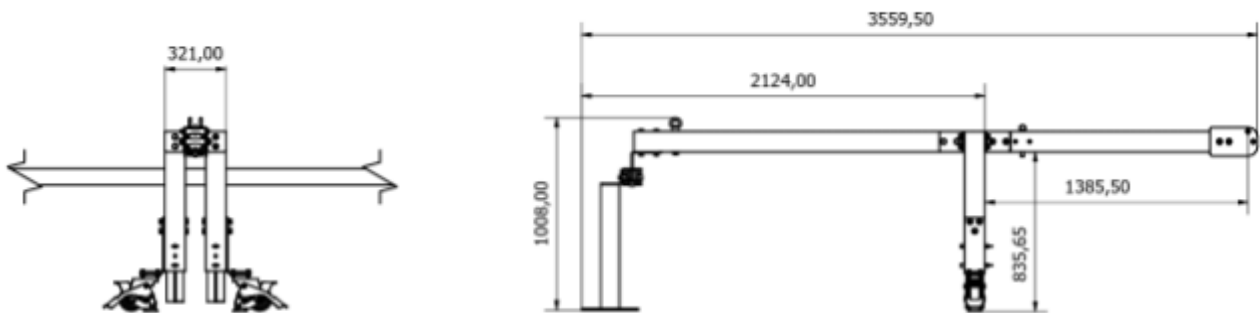


Figure 11

Material specification

A4/1.4401 ball bearing trolley

A4/1.4401 A80 Grade M16 Bolts

A4/1.4401 A70 Grade M16 Pins

6082-T6 Structural Aluminium

A4/1.4401 brackets

'MF' Indicates the product has is Mill Finish

'AF' Indicates the product has an AA20 Anodised Finish

'EP' Indicates the Stainless Steel has been electropolished

Installation / fixings

Edgeseil track is tested fixed into 150mm C30/35 concrete, 95mm deep with no rebar reinforcement within the sample area.

Test standards

-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 8610:2017 Personal fall protection equipment.

Dynamic testing: 9kN

Static testing: 21kN

Product warranty

10 Years Standard Warranty

20 Years SAYFA+ Warranty

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



GET IN TOUCH

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