



**PRODUCT
BROCHURE**

**Sayfa Systems UK
Abseil Range**



Facade Access Range

Single point anchors to abseil rails

OUR PURPOSE IS TO KEEP PEOPLE SAFE WHEN WORKING AT HEIGHT

An increase in population density is leading inevitably to an increase in the number of high-rise buildings and high rise living is becoming the new norm, not just in capital cities. Most major cities now have a high rise building strategy, which clearly signifies that high rise living as a way of life is here to stay.

This now means that Façade access for cleaning and maintenance is an increasing feature of the safety strategy that has to be built into the building and it is for this reason that Sayfa has decided to focus on a range of products dedicated to Façade access.

The range now consists of the DA range of Davit arms and bases, the Raptor Rail abseil rail, a range of abseil anchors and a combined abseil and safety line post which is used where space is limited or there is a need to minimise the number of roof penetrations.

RANGE FEATURES

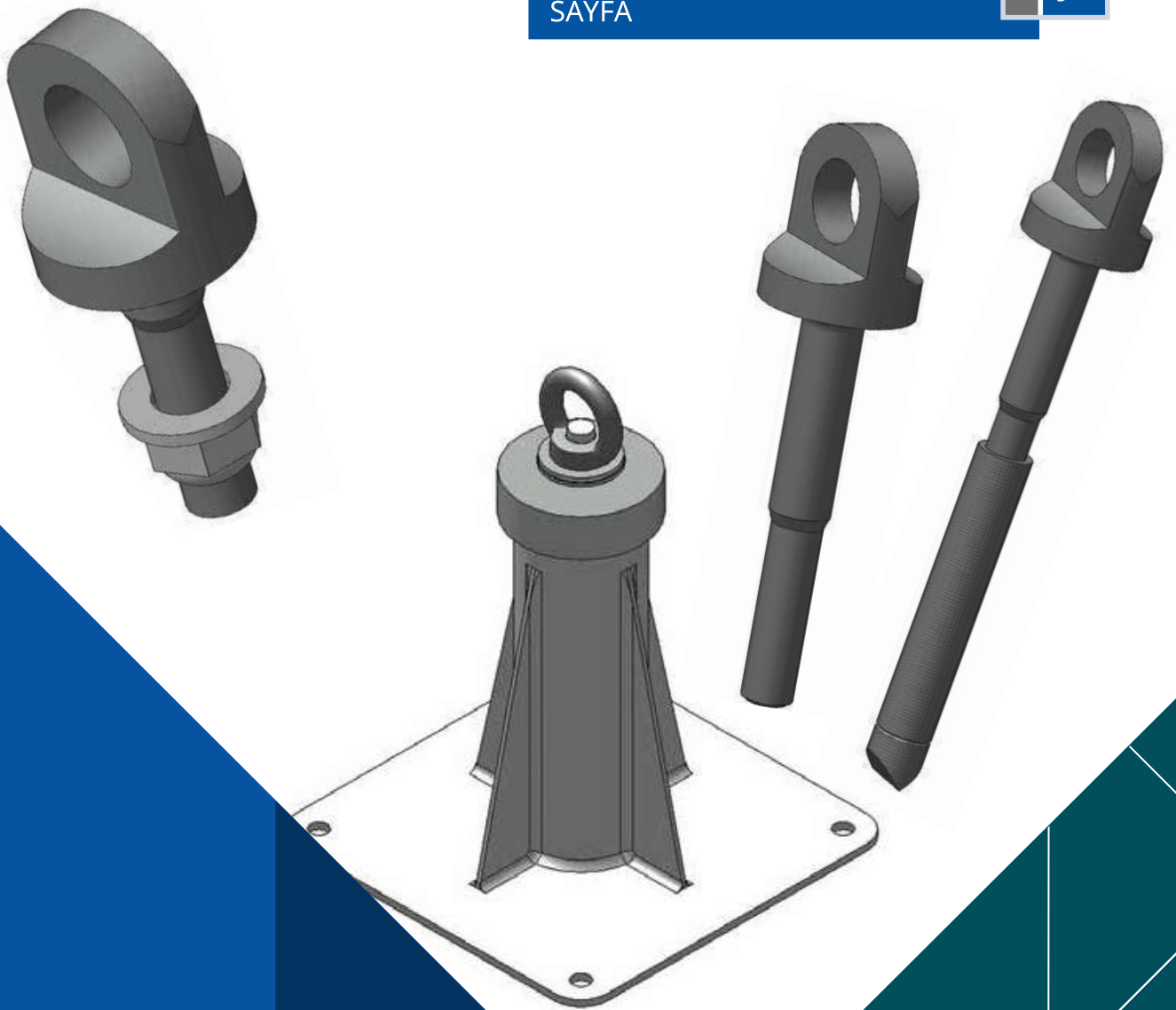
- Galvanised or Stainless options
- Cast in, deck or side mounted
- Stainless steel fixings
- Powder coating option
- Abseiler Endorsed

APPLICATIONS

- Window and Façade cleaning
- Materials lifting
- Facade maintenance

“Having safe access to the facade of our building is key to it's maintenance”





**PRODUCT
BROCHURE**
Abseil Anchors



Abseil Anchors

For facade access



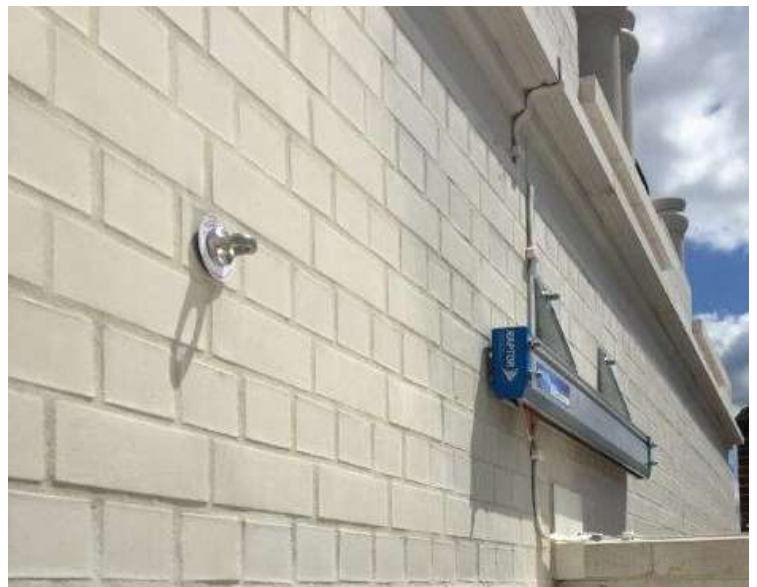
Abseil anchors are designed to be fixed to a structural substrate such as structural steel or concrete to provide suitable rope access connection points. There are 2 types of abseil anchors available – abseil posts and abseil eyebolts. Abseil eyebolts are supplied in stainless steel. Posts and eyebolts are secured to concrete with resin anchors and to steelwork with stainless steel bolts, washers and vibration proof nuts. When fixing to metal deck it may be necessary to provide a backing plate to ensure compliance with loads to the structure.

APPLICATIONS

- Designed for Abseil purposes
- Cleaning of Facades and for maintenance purposes
- Offering access to areas not available by conventional means
- Can be fixed to steel or concrete
- Used in conjunction with abseil rail or other products

SPECIFIC PRODUCT SPECIFICATION

- Abseil posts in Galvanised Steel or stainless
- Side, top or deck fix options
- Stainless steel fixings for Posts
- Powder coating option





Abseil Anchors

Different Uses

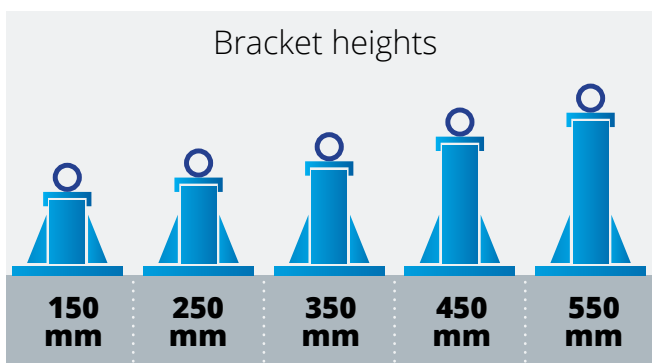
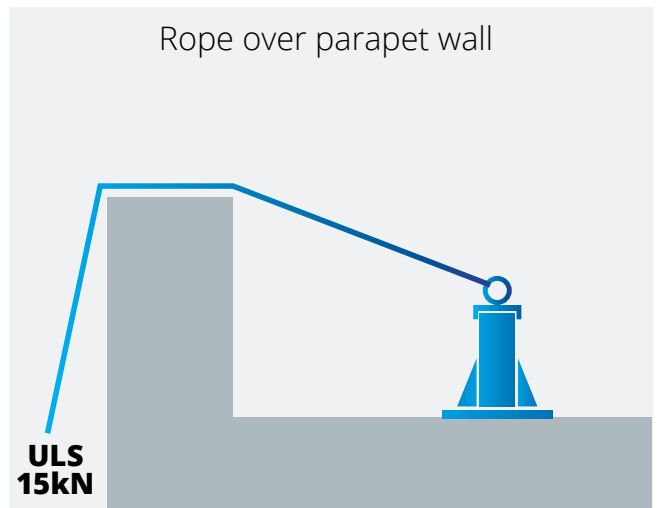
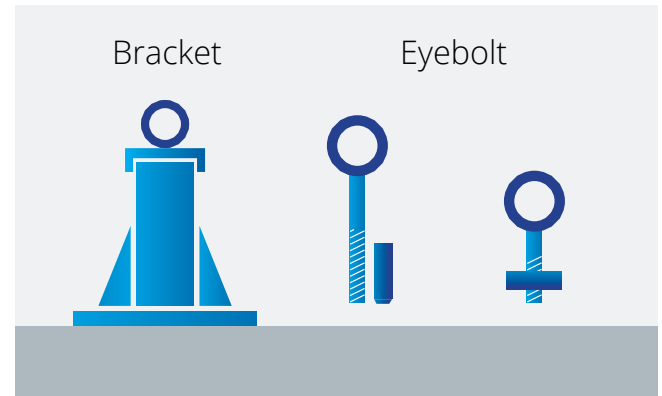
Both abseil posts and eyebolts can be installed on the horizontal or vertical substrates of a building. Careful consideration must be taken when designing the abseil positions to ensure abseil ropes will not foul with any roof plant or roof penetrations. If ropes are required to lie over any parapet walls or edge protection such as balustrading it will be necessary to ensure that the parapet has been re-enforced. The use of an abseil rope spreader plate can reduce the point loading considerably.

The brackets are designed for 1 user at any one time and 2 users in the event of emergency access requirements. Brackets need to be positioned so any rope connections do not exceed a 120 degree angle when in use – an angle of 90 degrees is recommended. This will be determined by the design layout and position of the anchors. Involving our specialist design teams as early as possible will ensure the most cost effective system is used without compromising any safety or access requirements. Our designers will consider the welfare and safety of both rope access and non-rope access personal during the construction and future use.

Brackets can be supplied in varying heights from 150mm up to 750mm to accommodate different roof constructions. The brackets are manufactured with a strengthening gusset

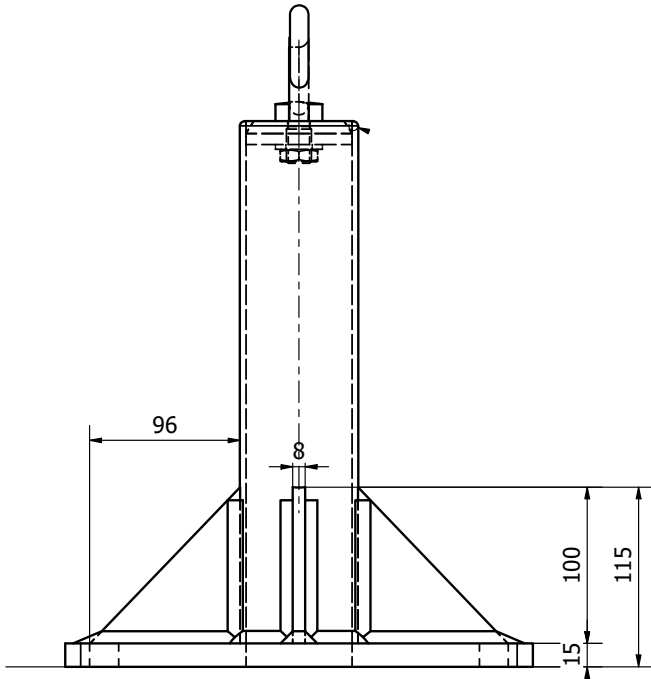
To ensure compliance with 15kN design load requirements. Eyebolts are supplied in 150mm or 100mm lengths for concrete.

Shorter eyebolts of 50mm are used in structural steel.



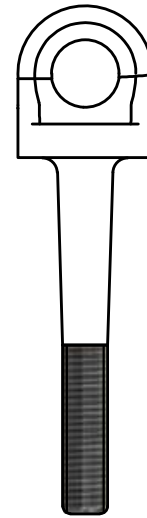
Abseil Post

From 150mm to 750mm in height



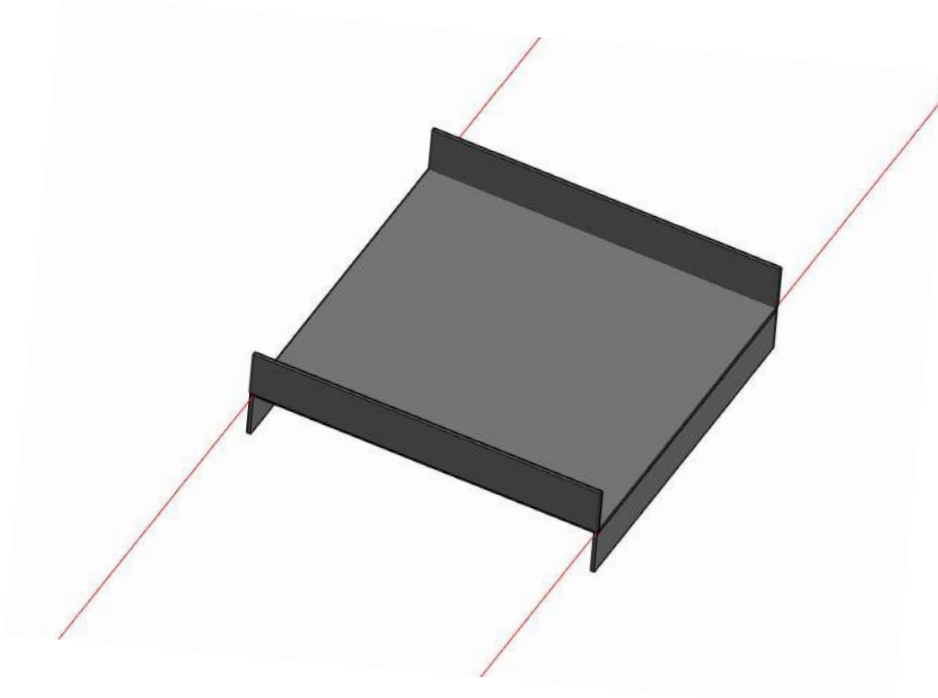
Abseil Eyebolt

Varying lengths for different substrates



Abseil Spreader Plate

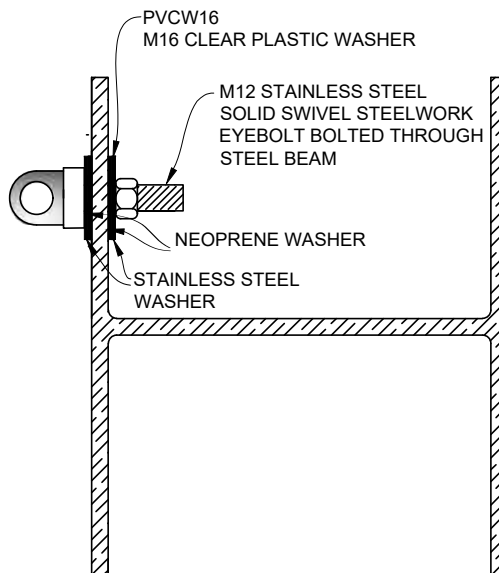
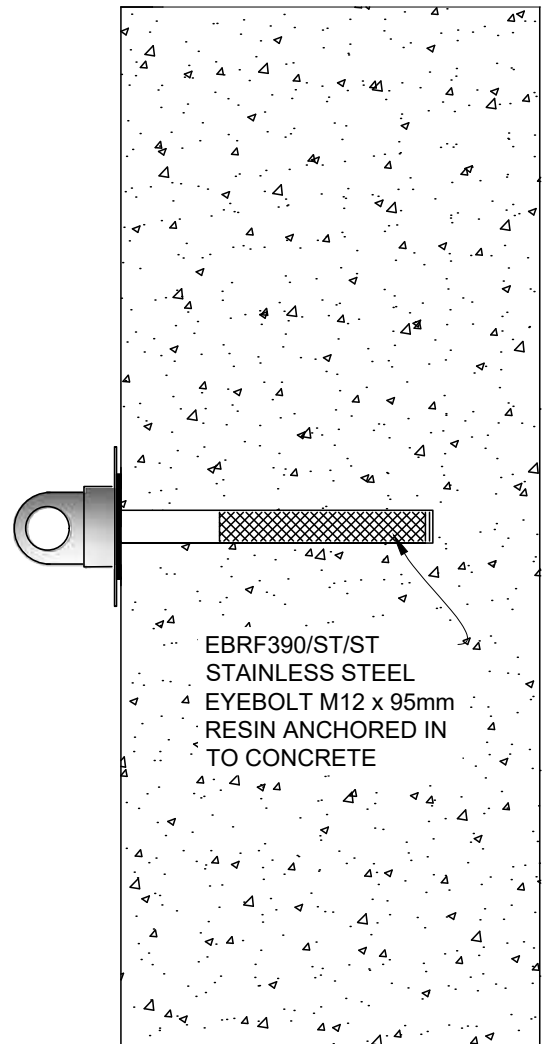
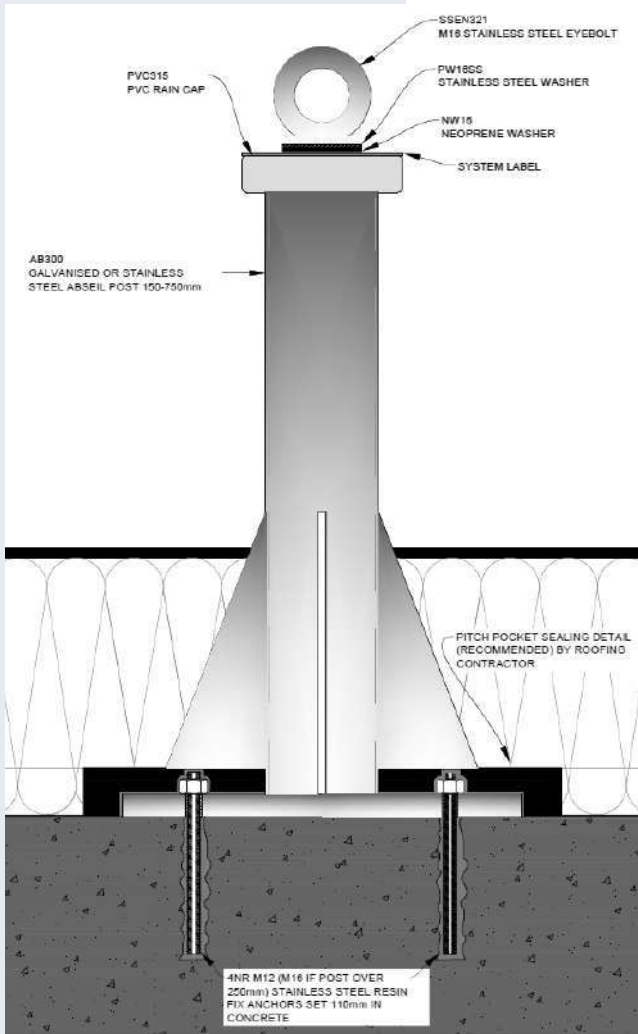
Can be custom made for your parapet to spread the loads on the coping





Abseil Anchor Fixing Details

Common Fixing Details





**PRODUCT
BROCHURE**

**Abseil & Fall Arrest /
Restraint Rail**



ABSEIL & RESTRAINT RAIL

An efficient solution



“The use of a rail system has saved us a lot of time and enabled us to complete our works twice as fast over conventional means.”

The Sayfa Systems rail system is designed to be fixed to a substrate such as structural steel or concrete to provide a continuous rope access connection point. The rail is supplied with a wheeled connection point which moves smoothly along the track and around any profiled corners and bends, without the need to disconnect.

APPLICATIONS

- Designed for Abseil, fall arrest and fall restraint use
- Cleaning of Facades and for maintenance purposes
- Offering access to areas not available by conventional means
- A more efficient means of facade access over traditional means

SPECIFIC PRODUCT SPECIFICATION

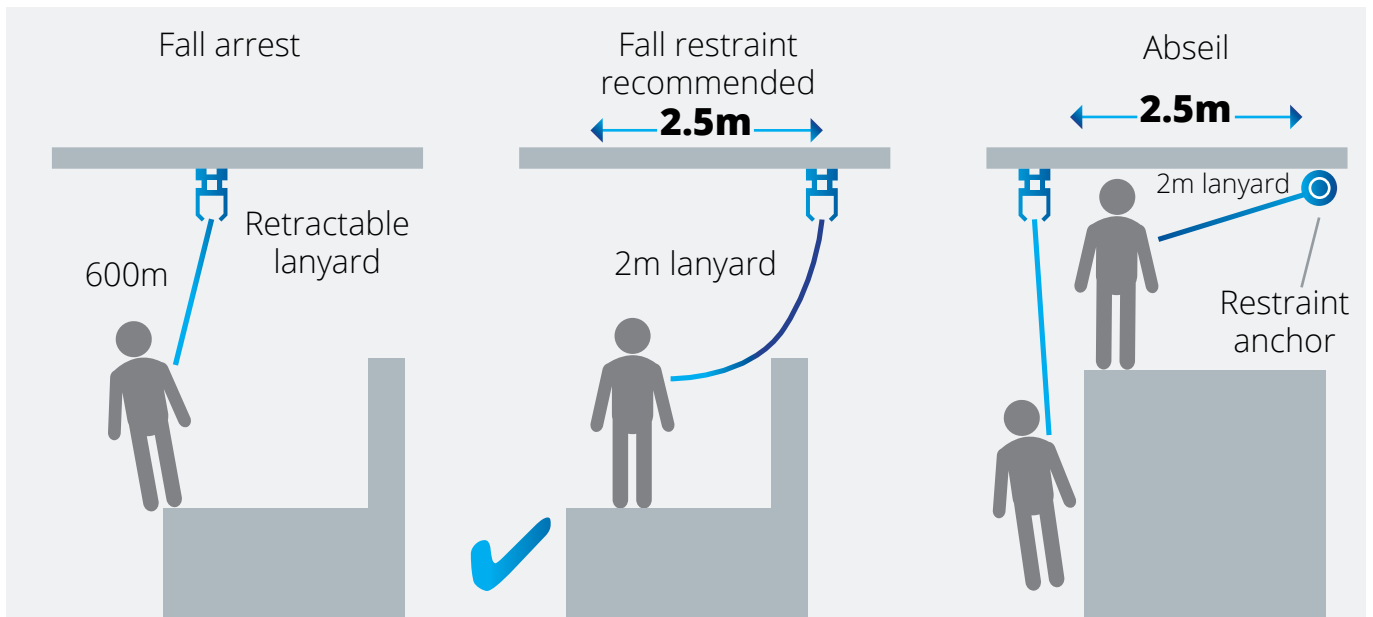
- Extruded aluminium with every batch load tested to ensure material compliance
- Spans up to 6m between brackets
- 4 users capability
- Stainless steel rollers to provide smooth travel in any orientation as well as excellent wear resistance
- Side or Top fix
- Stainless steel fixings
- Track and connection points are certified for up to 33kN loads





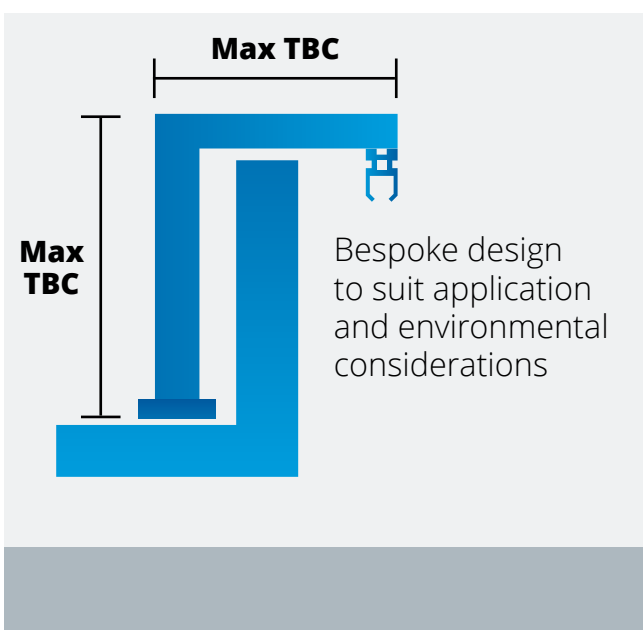
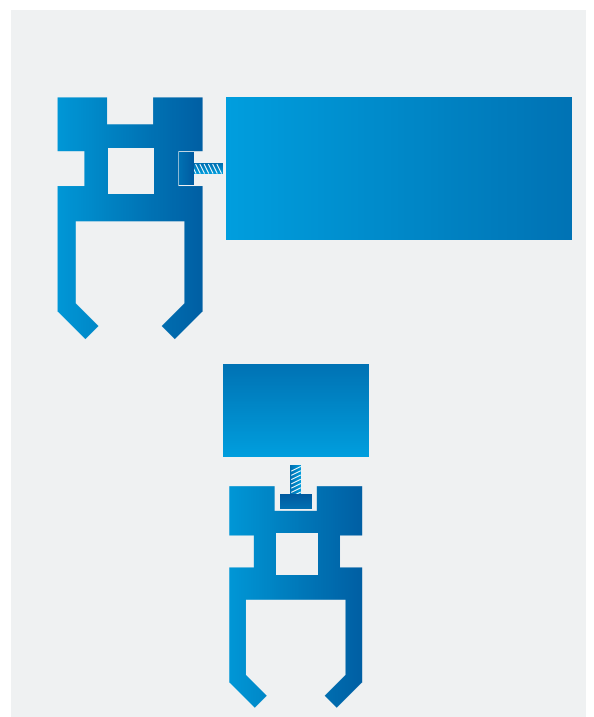
Rail

Different Uses



When using the system for abseil use it may be necessary to fit support steels and brackets over a parapet wall or obstruction if the abseil ropes cannot press down on the building edge. This is normally required when there is a light duty edge capping or parapet wall or balustrade that has not been designed for abseil use.

All support steel and the connection to the building construction must be designed to an ultimate force of 15 - 33kN dependent on the number of users. It is recommended that any support brackets are designed prior to the building construction to avoid any unnecessary or additional rework.



A number of different fixing options are available for the Raptor rail. Due to the construction of the extrusion it is very easy to attach the rail to both top or side fixings. The extrusion has a fixing slot which can accommodate Sayfa T-bolts along the complete section of the track. This flexibility ensures reduced installation time on site.



**FACADE
ACCESS
SYSTEMS
COMBINED
AVIATOR &
ABSEIL POST**

CS 150, 250, 350, 450, 550,
650, 750



Facade Access Systems

Combined Aviator & Abseil Post

The Combined Aviator & Aviator Abseil Post has been developed to reduce roof installations in order to limit the number of times a roof membrane needs to be penetrated and re-sealed.

By introducing a combined function post not only are the number of installations halved but there is a reduced number of posts on the roof making for improved access and working efficiencies.

An uncluttered work area makes an important contribution to a safe working environment and helps to reduce the risks that come from working at height.

APPLICATIONS

An effective fall restraint system and secure abseil points provide a safe working environment for:

- Roof access for inspection and maintenance of:
 - Photo-voltaic panels
 - Air-conditioning units
 - Roof drainage systems
- Safe facade access by means of abseil to enable:
 - Window and facade cleaning
 - Window inspection
 - Small miscellaneous maintenance tasks

PRODUCT FEATURES

- Posts range in height from 150mm to 750mm in 100mm increments
- All posts are fully galvanised to BS EN ISO 1461
- Stainless steel option
- Safety line brackets are mounted over the abseil point to shield and protect the abseil attachment
- Injection moulded rain cap to guarantee roof integrity
- Complete range of fixing methods for all roof types

“An uncluttered work area makes an important contribution to a safe working environment and helps to reduce the risks that come from working at height.”





Facade Access Systems

Combined Aviator & Abseil Post

Product Information & Inspection Routines

CS - 150 - 750

Size : Posts range in height from 150mm to 750mm in 100mm increments

Working loads: ULS 15 kN

Materials :

- Steel Galvanised to meet BS EN ISO 1461 - with a minimum galvanic coating thickness of 55 μm or 390 g/m^2
- 304 Stainless steel

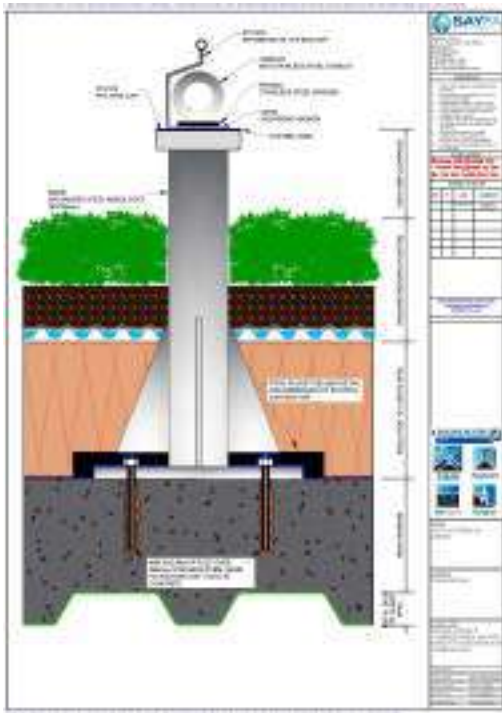
Thermal Conductivity: Low-Carbon/HSLAS: 89 $\text{W}/\text{m}^\circ\text{C}$ at 20°C I-F Steel: 93 $\text{W}/\text{m}^\circ\text{C}$ at 20°C

Inspection Routine

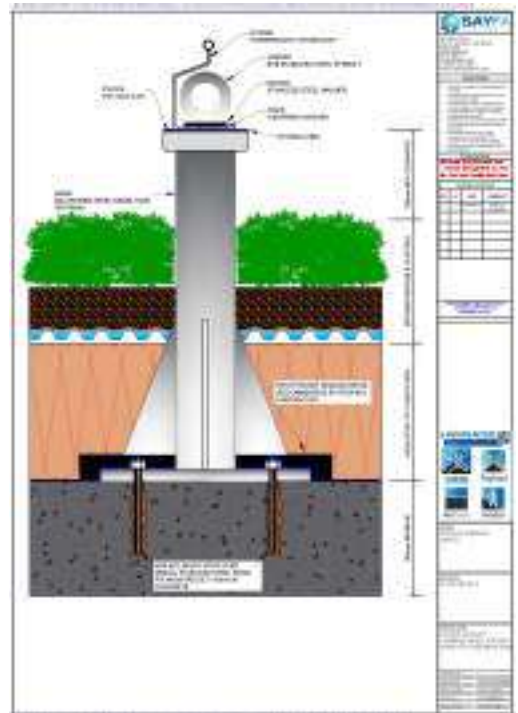
- All systems to be inspected at least every 6 months from date of installation.
- In harsh environments all systems to be inspected at least every 3 months.
- Inspections must be carried out by approved Sayfa engineers.
- Inspections must be approved to SIMS (Safety Inspection and Maintenance Service) standards.
- All inspections to be carried out to EN795:2012 and BS 7883:2005 and WAHSA (inspection of eyebolts) requirements for safety line and anchor points.
- Contact Sayfa Systems to arrange inspections.



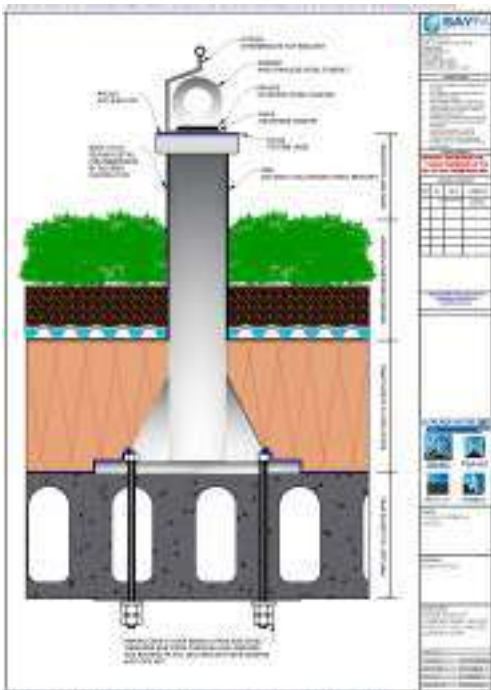
Fixing details



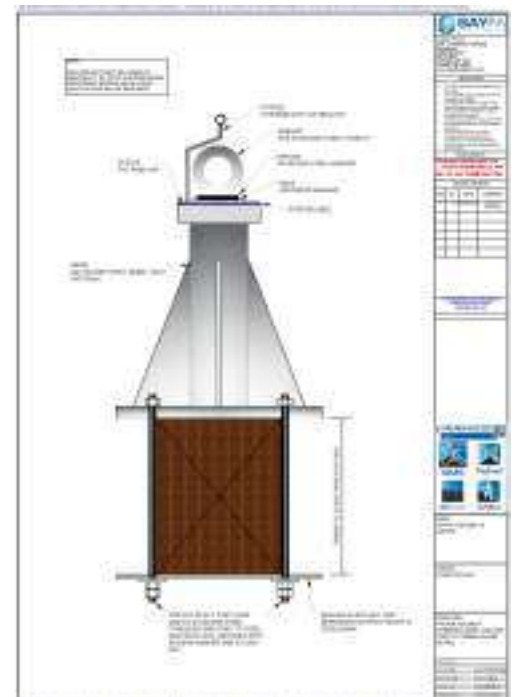
Concrete on Metal Deck



Concrete Slab



Hollowcore Concrete Deck



Fix to Timber



The Sayfa Facade Access System

Combined Aviator and Abseil post





Davit Based Systems

Davit arms up to 2.5m reach



“Designed to be removable and to be used together with the permanent Davit base plates. They are designed for lifting and lowering personnel and materials.”

Davit based abseil systems used for facade access are perfect for areas where no loading on the parapet , coping or balustrades is possible.

Designed to be portable and easily moved around site they come with a storage bag on arms up to 1.6m, lockable storage boxes to keep them secure while not in use on site also available.

Primarily used for abseil purposes they also have the ability to be used for materials lifting such as glass replacement.

APPLICATIONS

An effective davit system provides a safe working environment for:

- Safe facade access by means of abseil to enable:
 - Window and facade cleaning
 - Window inspection
 - Miscellaneous maintenance tasks

PRODUCT FEATURES

- Posts range in height from 70mm then from 150 mm to 850mm in 100mm increments
- Deck or Parapet fixed Electric or manual winch capability
- Cast in option in Stainless steel - To finish at deck level or extended davit base to allow for roof build-up
- Bespoke davit weathering surrounds with lid for deck level option





Davit Arms

Any size for any project

DA 800

Our most popular arm that covers most davit requirements

Size (Height and Reach)

1500mm x 850mm

Working loads

(Personnel and Goods)

136kg/450kg

Materials (For the arms)

- Aluminium 0.50 - 0.75 Si, Max 0.35, Fe 0.40 - 0.70 Mg
- Tensile strength 186MPa
Yield strength 110MPa

Inspection Routine

LOLER thorough examination at installation/ first use and then 6 monthly as required by legislation.

DA 1000

Designed with an extended reach and capable of Materials lifting

Size (Height and Reach)

1200mm x 1000mm

Working loads

(Personnel and Goods)

136kg/450kg

Materials (For the arms)

- Aluminium 0.50 - 0.75 Si, Max 0.35, Fe 0.40 - 0.70 Mg
- Tensile strength 186MPa
Yield strength 110MPa

Inspection Routine

LOLER thorough examination at installation/ first use and then 6 monthly as required by legislation.

DAP 1500

For increased parapet widths capable of materials lifting

Size (Height and Reach)

2000mm x 1500mm

Working loads

(Personnel and Goods)

120kg/350kg

Materials (For the arms)

- Grade 304 Stainless Steel for end boom section and fixings, aluminium tube for main boom and body

Standards

BS8610:2017

Inspection Routine

LOLER thorough examination at installation/ first use and then 6 monthly as required by legislation.

DAP 2000/2500

For increased parapet widths capable of materials lifting

Size (Height and Reach)

2000mm x 2000/2500mm

Working loads

(Personnel and Goods)

120kg/350kg

Materials (For the arms)

- Grade 304 Stainless Steel for end boom section and fixings, aluminium tube for main boom and body

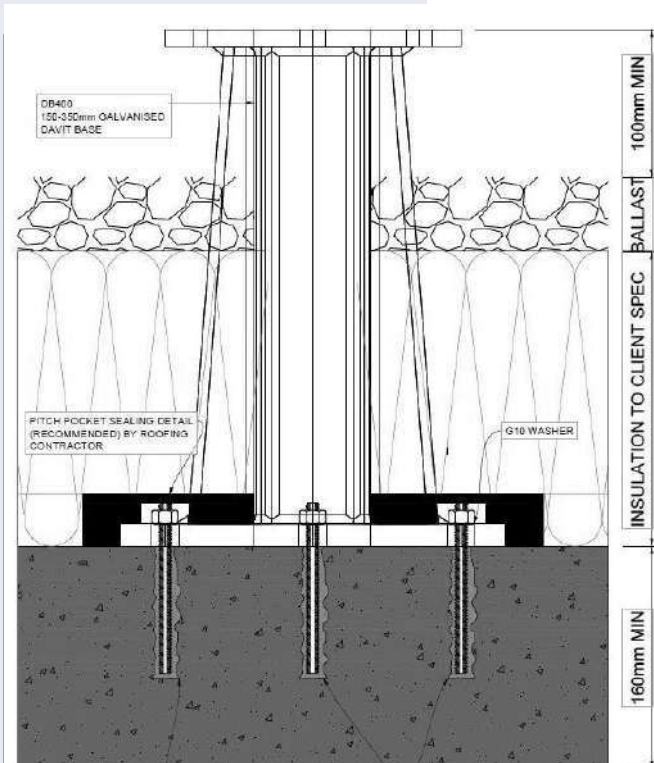
Inspection Routine

LOLER thorough examination at installation/ first use and then 6 monthly as required by legislation.

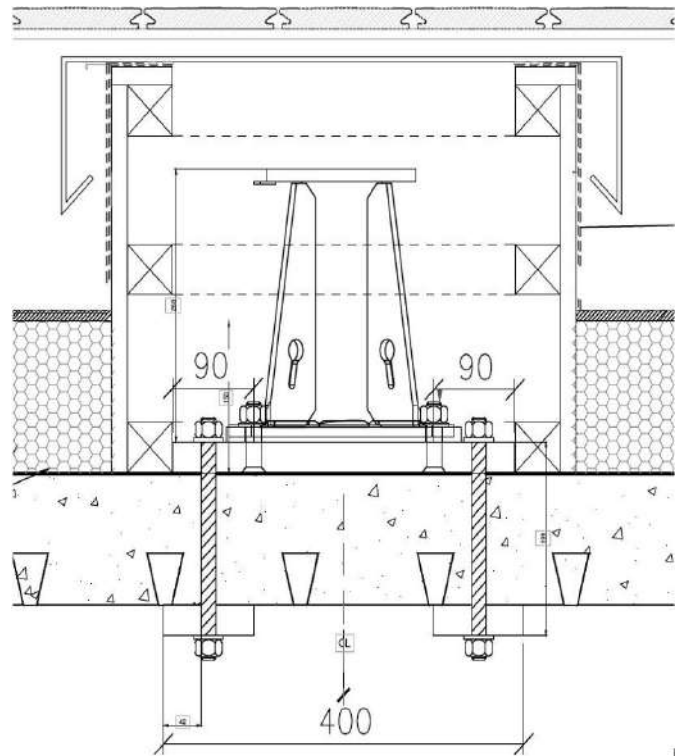


The Sayfa Facade Access System

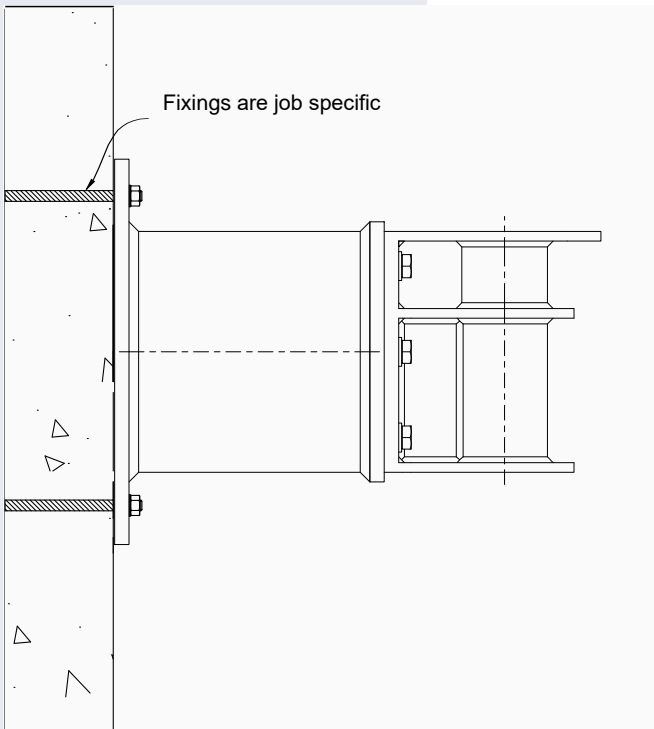
Davit Arms & Bases - Common Fixing Details



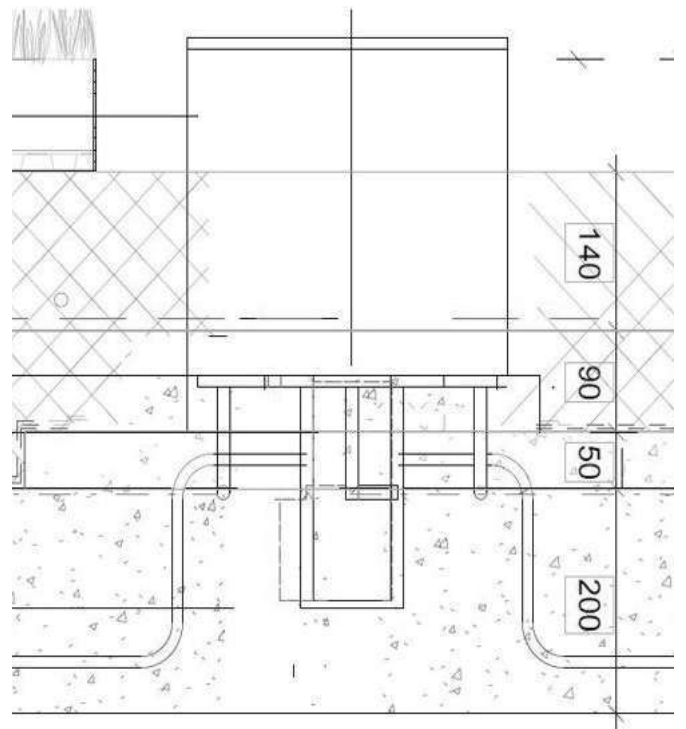
Standard Concrete Deck



Composite Deck



Parapet Fixed



Cast In

