

RIGID RAILS



Kattsafe fixed rigid rail provides efficient fall arrest and rope access for multiple users accessing façades, roofs and machinery for maintenance.



Product brochure
Rigid rails



Installation manual
Rigid 80 rail



Installation manual
Rigid 130 rail



Operation manual
Rigid rails - fall arrest



Operation manual
Rigid rails - rope access

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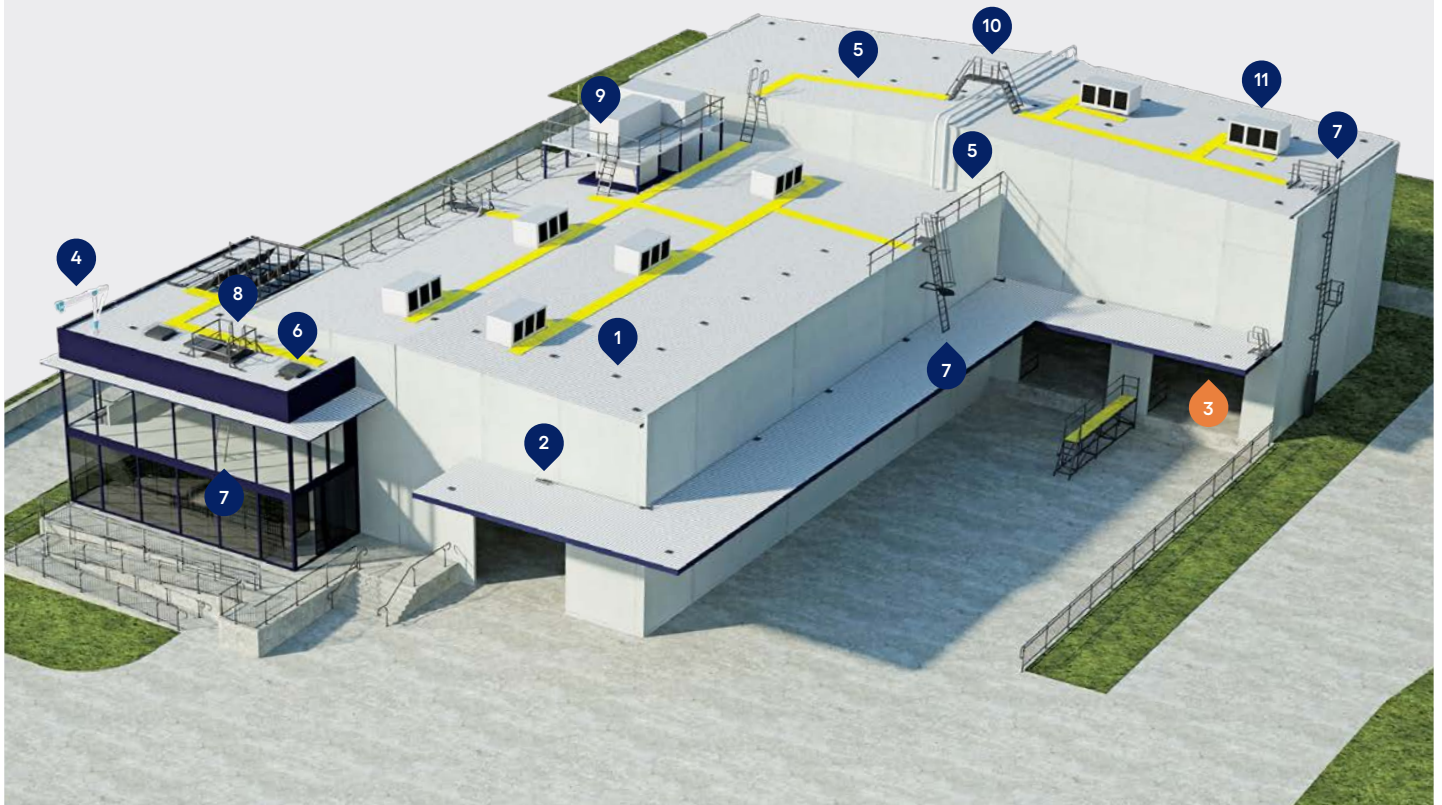
Commercial building height access and fall protection requirements

Kattsafe leads the industry in the design, installation and management of access and fall protection safety systems.

The in-action model demonstrates access and fall protection requirements for a commercial building design. Kattsafe recommendations fulfill current workplace requirements for the safety of building maintenance subcontractors, employees and the general public.

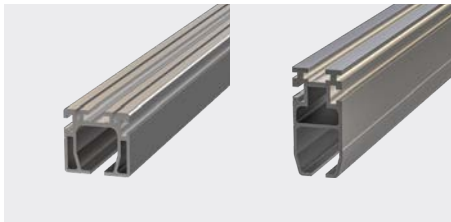
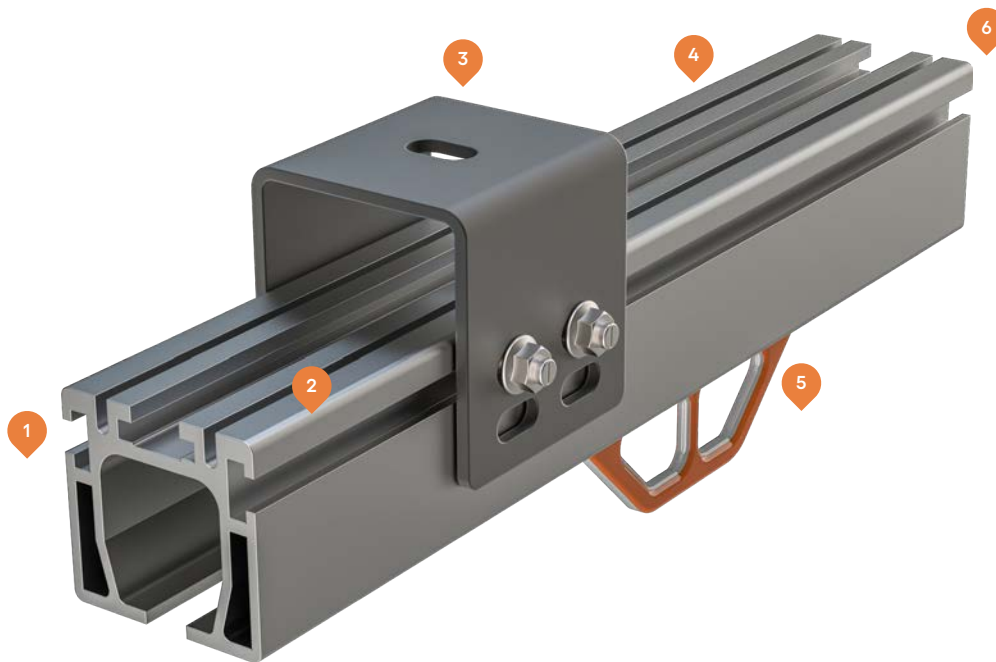
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- 1 Anchor points
- 2 Static lines
- 3 Rigid rail
- 4 Davits and needles
- 5 Guardrail and walkway
- 6 Skylight protectors
- 7 Rung ladders
- 8 Access hatches
- 9 Platforms and stairs
- 10 Step ladders
- 11 HVAC platforms



RIGID RAILS

Rigid rails are a proprietary fall arrest and rope access system providing uninterrupted mobility for the operator.



Size options

Available in two different sizes and capabilities to suit many different requirements.



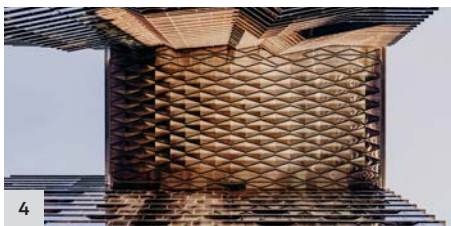
High strength construction

Designed for increased point load and minimum visual impact with a complete aluminium construction.



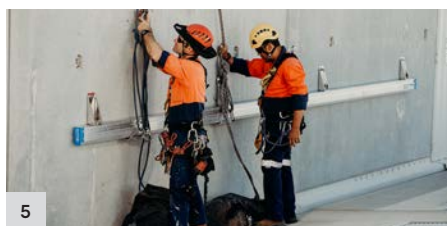
Mounting options

Designed to be used in multiple different areas, rigid rails have many different mounting options to suit any situation or requirement.



Large spanning capabilities

Designed to span up to 6m, the strengthened design provides uninterrupted, smooth lateral mobility for the users.



Multiple user operation

Suitable for multiple operators at any one time making it an efficient system for facade and atrium access, cleaning and maintenance.



Bends and curves

Designed to work along side corners and irregular curves in a building's design to provide effective rope access and fall protection.

Rigid rail is a proprietary fall arrest and rope access system where uninterrupted lateral mobility is required.

Rigid rail is a proprietary fall arrest and rope access system providing uninterrupted mobility for the operator.

Kattsafe's rigid rails are suitable for multiple operators at any one time making it an efficient system for facade and atrium access, cleaning and maintenance.

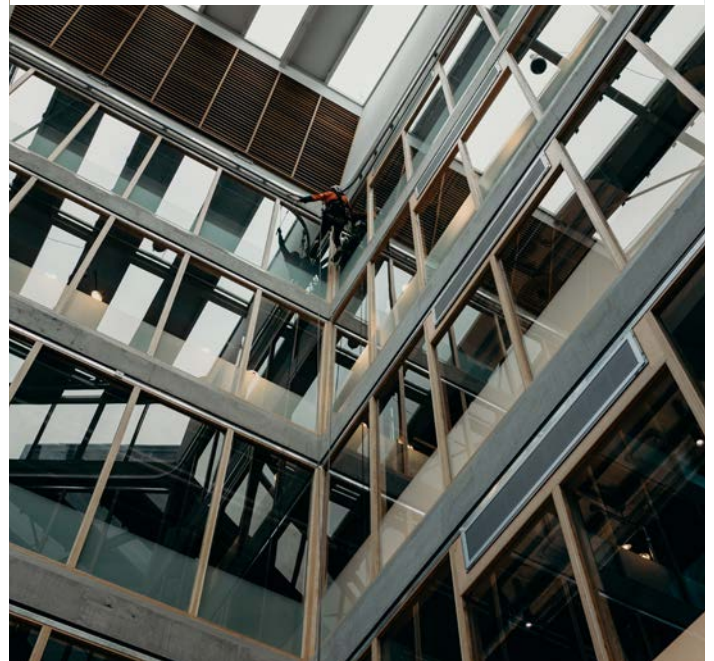
Rigid rails provide significant spanning capabilities, making them very versatile where there are limited support structures.

The high strength aluminium construction, along with the unique t-bolt assembly makes it a very simple and easily adaptable system to install.

Ideal applications for rigid rails would include overhead fall protection when accessing elevated machinery for maintenance, as well as a range of rope access applications for maintenance of building façades, atriums, ceiling mounted equipment and other rope access requirements.

Features and benefits of the system:

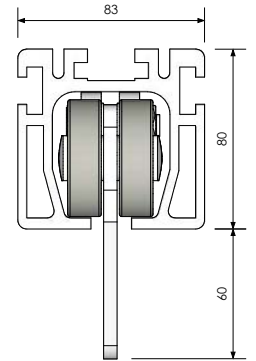
- Fall arrest and rope access suitability.
- Uninterrupted, smooth lateral mobility.
- Multiple user ability at any one time.
- Large spanning capabilities.
- Curving ability for corners and irregular building outlines.
- Can be powder coated or flush mounted ensuring minimal aesthetic impact.



RIGID RAIL RANGE

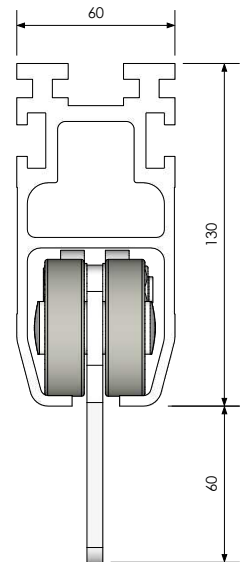
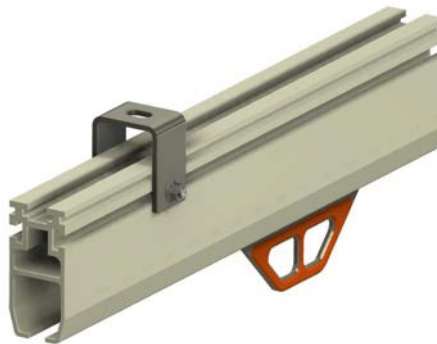
Rigid 80 rail

- Rated to 21kN for fall arrest and 18kN for rope access.
- Up to 600kg per trolley point load.
- Increased point load ability for glass replacement requirements.
- Curving ability down to 1000mm radius.
- Ideal for compact and out of sight requirements.
- Simple installation using the t-bolt mounting system to outer cavity wall.
- Spanning capability up to 3.0m for a single user per span.
- Allows attachment of suspended ceiling systems to side of track where required.



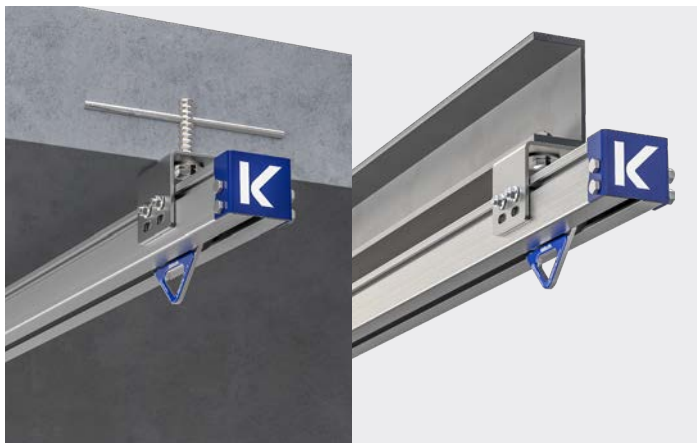
Rigid 130 rail

- Rated to 21kN for fall arrest and 18kN for rope access.
- Up to 490kg per trolley point load.
- Ideal for long spanning requirements up to 4.0m standard or 6.0m using long span attachment.
- Curving ability down to 1000mm radius.



RIGID RAIL CONFIGURATIONS

OH23 Rigid 80 rail - flush mount



OH24 Rigid 80 rail - suspended mount



OH25 Rigid 80 rail - concrete ceiling mount



OH26 Rigid 80 rail - adjustable concrete mount



OH27 Rigid 80 rail - side/floor mount 100mm



OH28 Rigid 80 rail - side/floor mount 200mm



OH1 Rigid 130 rail - purlin mount in-line



OH2 Rigid 130 rail - purlin mount across



OH3 Rigid 130 rail - flush mount



OH4 Rigid 130 rail - suspended mount



OH5 Rigid 130 rail - concrete ceiling mount



OH6 Rigid 130 rail - metal deck mount



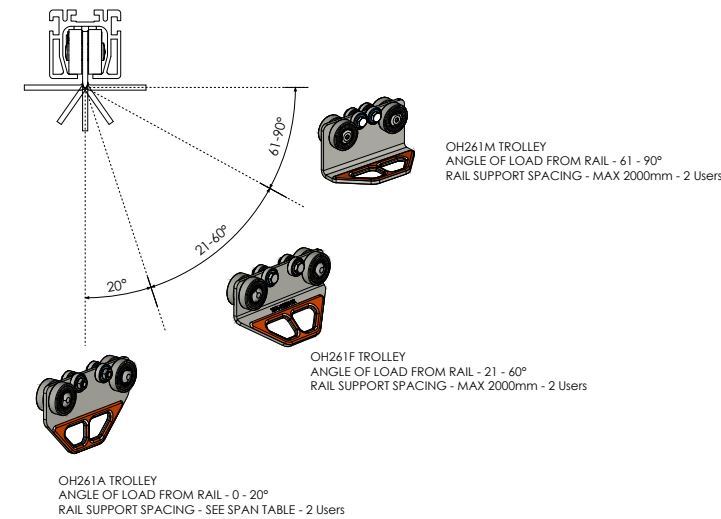
OH7 Rigid 130 rail - side/floor mount 100mm



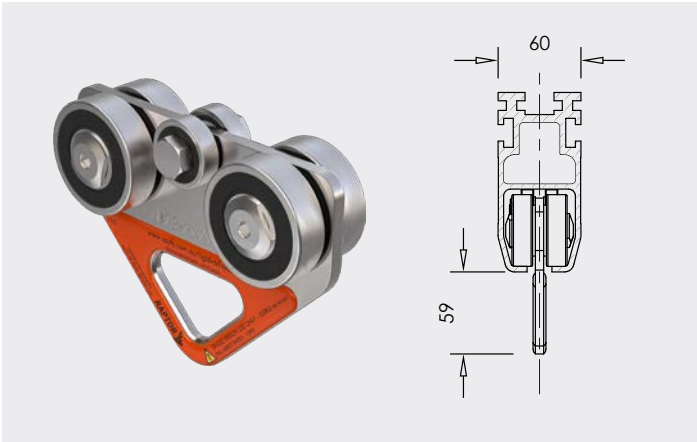
OH8 Rigid 130 rail - side/floor mount 200mm



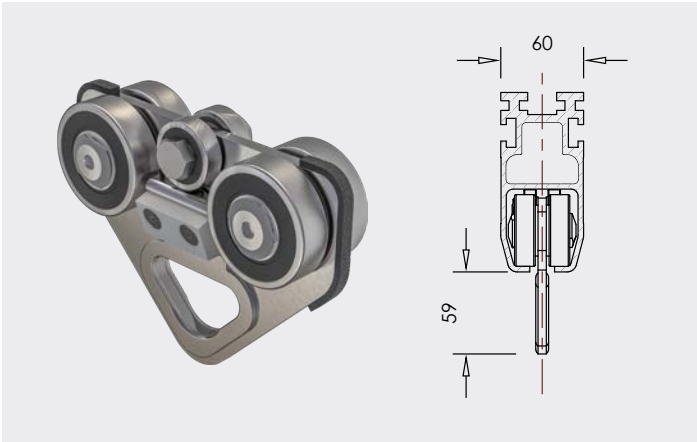
TROLLEY CONFIGURATIONS



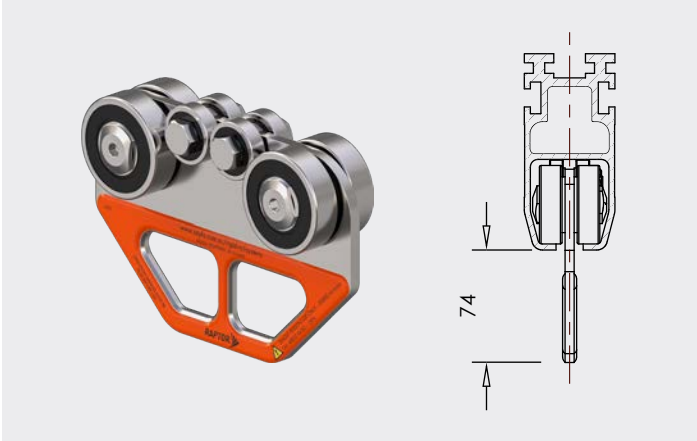
OH260 Rigid rail trolley single attachment



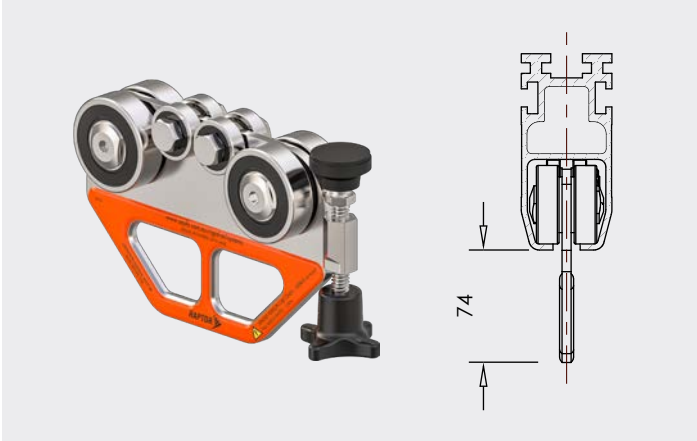
OH260B Rigid rail trolley single attachment - braking



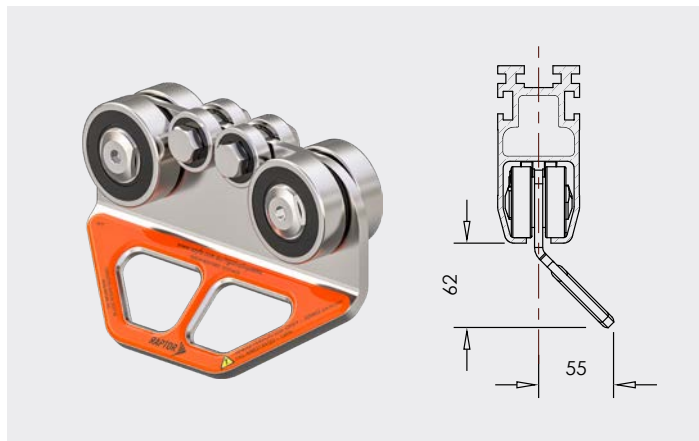
OH261A Rigid rail trolley dual attachment



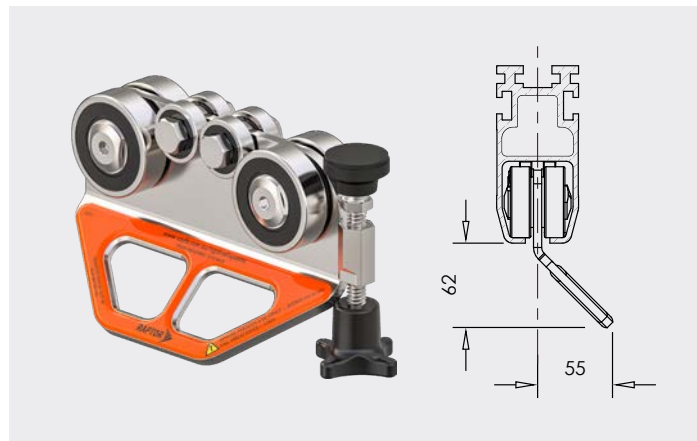
OH261AL Rigid rail trolley dual attachment - lockable



OH261F Rigid rail trolley offset dual attachment



OH261FL Rigid rail trolley offset dual attachment - lockable



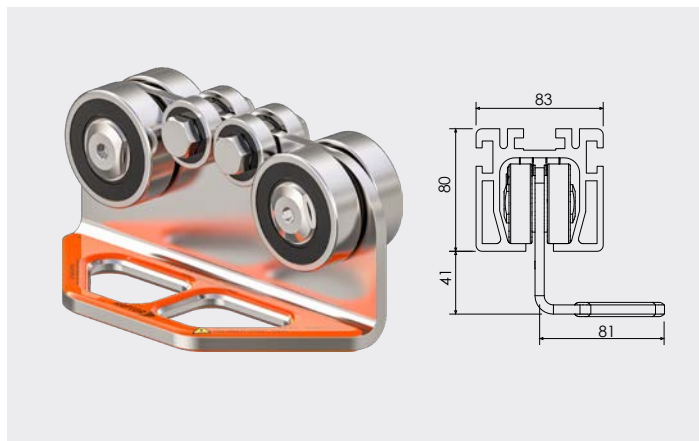
OH261V Rigid 130 rail trolley multi direction dual attachment



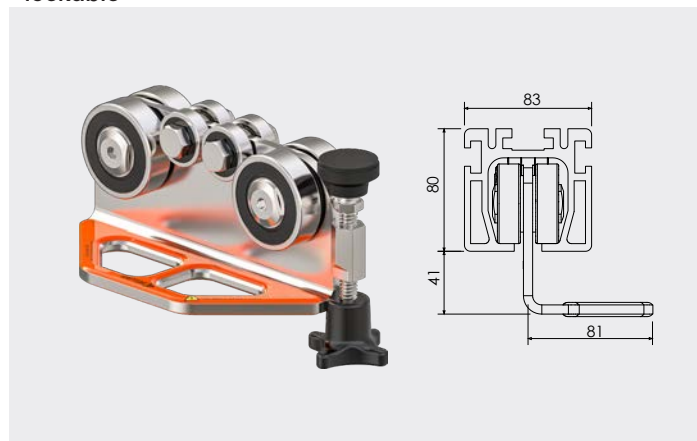
OH261VL Rigid 130 rail trolley multi direction dual attachment - lockable



OH261M Rigid 80 rail trolley multi direction dual attachment



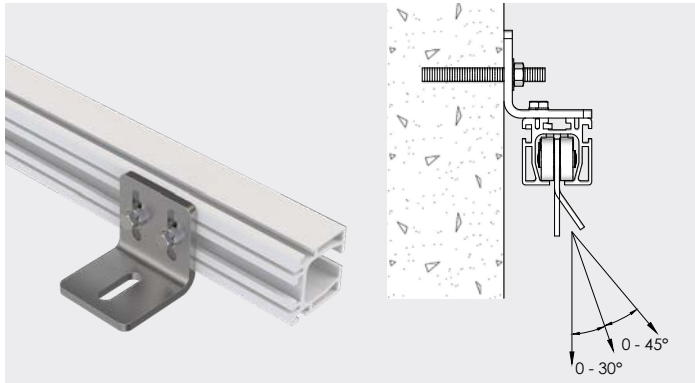
OH261ML Rigid 80 rail trolley multi direction dual attachment - lockable



BRACKET & TROLLEY DETAILS

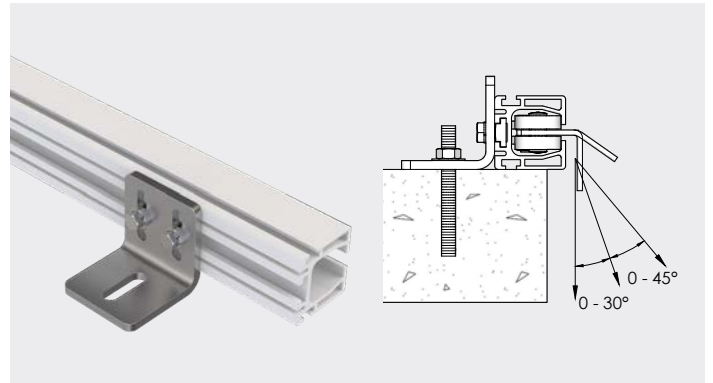
OH266.100 Side mount bracket

Single bracket attachment, suitable for 0° - 45° load direction.



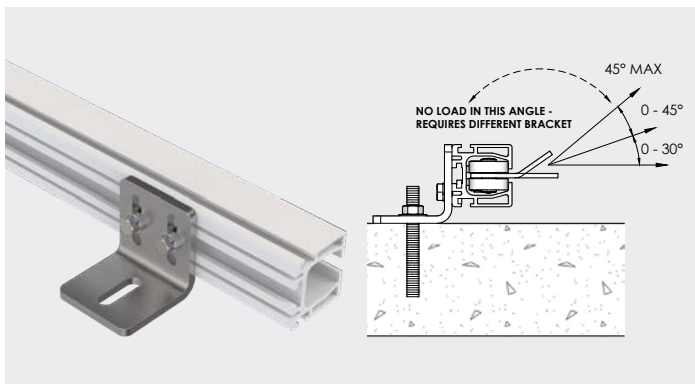
OH266.100 Floor mount bracket

Single attachment with rail supported on floor. Suitable for 45° - 90° lateral load direction.



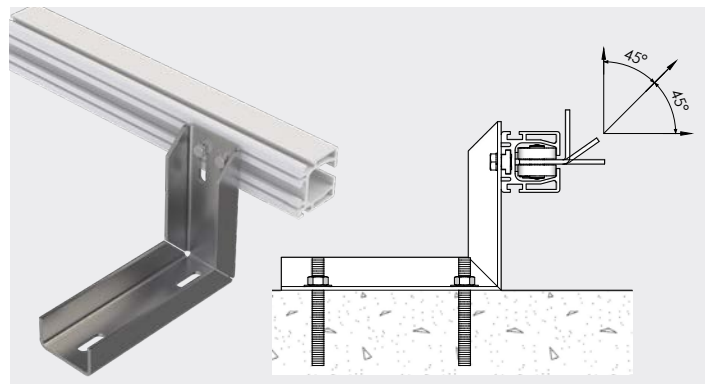
OH266.100 Floor mount bracket

Single bracket attachment, suitable for 0° - 45° load direction.



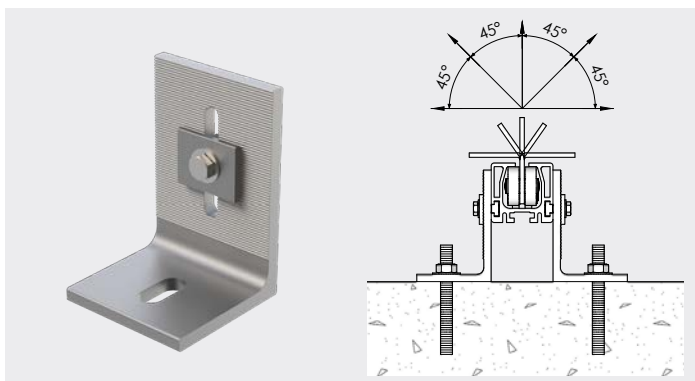
OH266.200 Floor mount bracket

Single bracket attachment, suitable for 0° - 45° load direction.



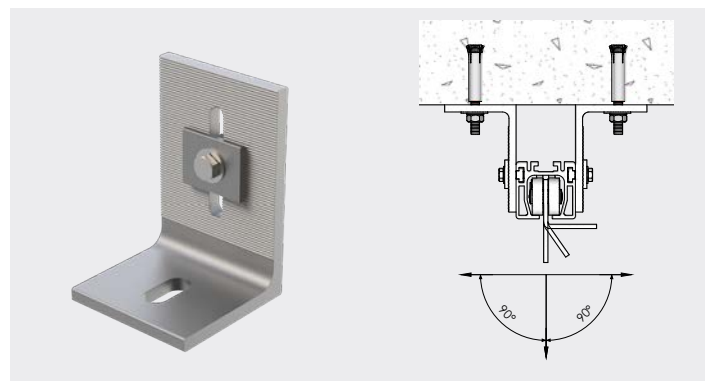
OH273 Adjustable L bracket

Dual bracket attachment, suitable for 180° load direction.



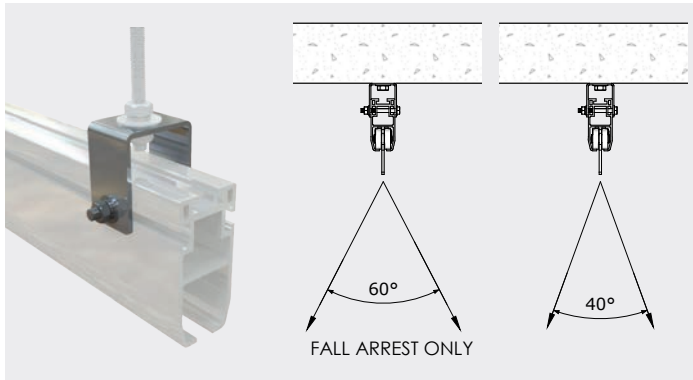
OH273 Adjustable L bracket

Dual bracket attachment, suitable for 180° load direction.



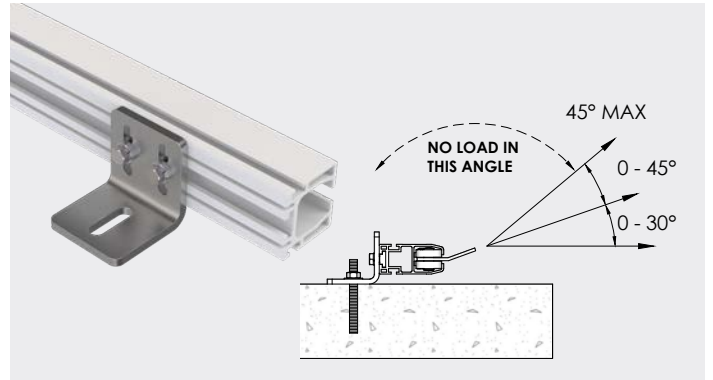
OH272.16 U bracket kit

Single bracket attachment, suitable for 0° - 60° load direction.



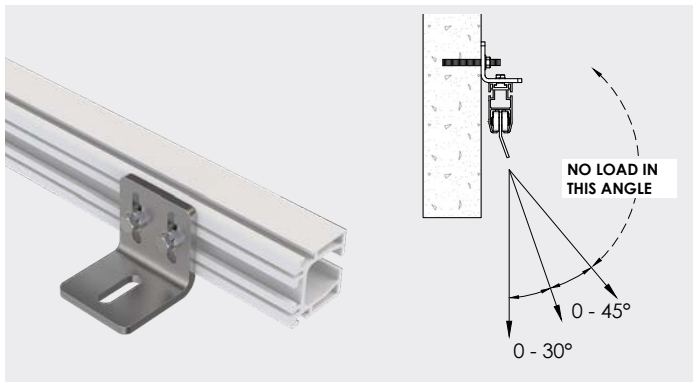
OH266.100 Floor mount bracket (rigid 130 rail)

Single bracket attachment, suitable for 0° - 45° load direction.



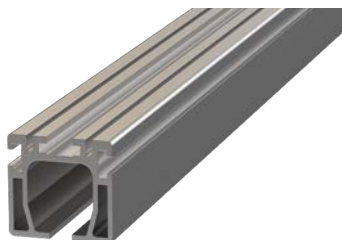
OH266.100 Floor mount bracket (rigid 130 rail)

Single bracket attachment, suitable for 0° - 45° load direction.



RIGID RAIL COMPONENTS

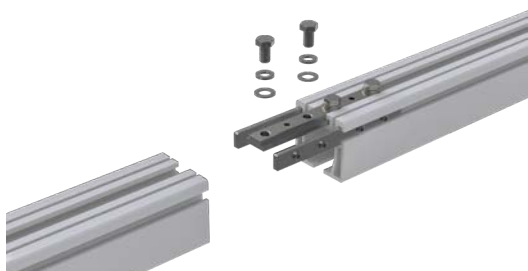
OH205 Rigid 80 rail



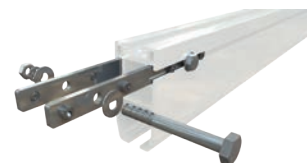
OH255 Rigid 130 rail



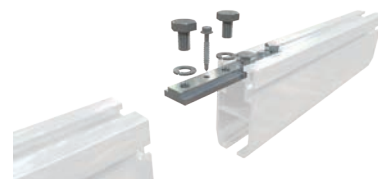
OH212 Rigid 80 rail splice joiner bar kit



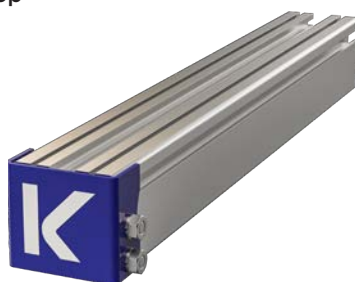
OH262 Rigid 130 rail splice joiner bar kit



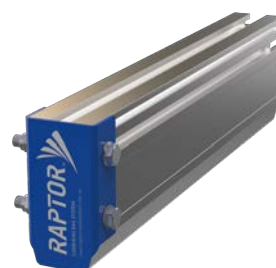
OH263 Rigid 130 rail t-joiner kit



OH215 Rigid 80 rail end-stop bracket



OH265 Rigid 130 rail end-stop bracket



RIGID RAIL BENDS

Rigid 80 rail bend criteria

- Minimum Radius: 1000mm.
- Available in 3.0m, 4.0m and 6.0m lengths.
- Up to 3.0m radius, rail bend requires 3 supports at 1.5m centres.
- Over 3.0m radius, rail bend requires 3 supports at 2.0m centres.
- Rail joins to be supported within 500mm from nearest support.

	Code	Weight (kg)	Length (mm)
Corner	OH206.90	18	3000
	OH206C.3000	18	3000
Curved	OH206C.4000	24	4000
	OH206C.6000	35	6000
Bend	OH206V.3000	18	3000
	OH206V.4000	24	4000
	OH206V.6000	35	6000

OH206.90 Rigid 80 rail corner

- 90° at 1000mm radius minimum.
- Corner incorporated over a designated section of rail only.



OH206C Rigid 80 rail curve

- Curve incorporated over full rail length.
- Used when matching the building footprint.



OH206V Rigid 80 rail bend

- Bend incorporated over a designated section of rail only.
- Used when matching the building footprint.



Rigid 130 rail bend criteria

- Minimum Radius: 1000mm.
- Available in 3.0m, 4.0m and 6.0m lengths.
- Up to 3.0m radius, rail bend requires 3 supports at 1.5m centres.
- Over 3.0m radius, rail bend requires 3 supports at 2.0m centres.
- Rail joins to be supported within 500mm from nearest support.

	Code	Weight (kg)	Length (mm)
Corner	OH256.90	17	3000
	OH256C.3000	17	3000
Curved	OH256C.4000	23	4000
	OH256C.6000	36	6000
Bend	OH256V.3000	17	3000
	OH256V.4000	23	4000
	OH256V.6000	36	6000

OH256.90 Rigid 130 rail corner

- 90° at 1000mm radius minimum.
- Corner incorporated over a designated section of rail only.



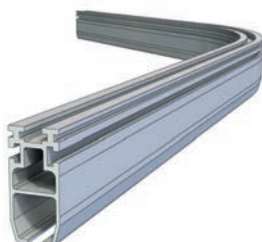
OH256C Rigid 130 rail curve

- Curve incorporated over full rail length.
- Used when matching the building footprint.



OH256V Rigid 130 rail bend

- Bend incorporated over a designated section of rail only.
- Used when matching the building footprint.



GLASS REPLACEMENT

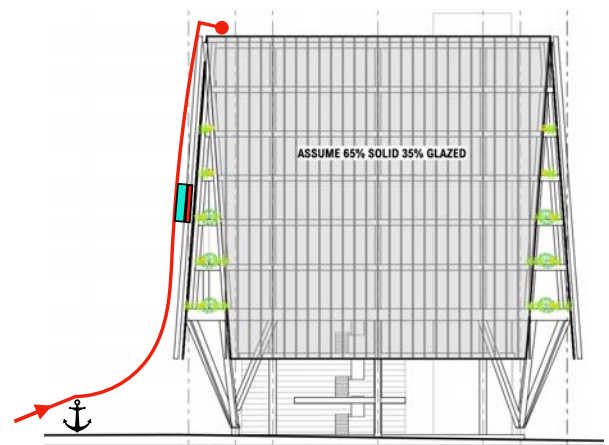
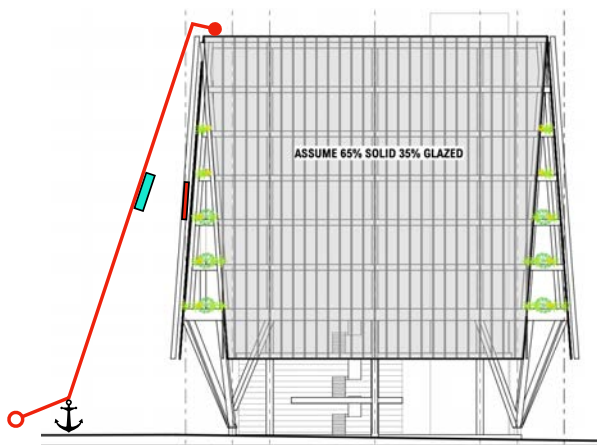
Rigid rails are designed to be used for both rope access and glass lifting for replacement on building façades. Because glass lifting loads are significant, it's very important that the rail support structure and connection method of the rail to the structure is approved by a competent person. Rigid rails provide a versatile and cost effective method for replacement of glass panels or others similar facade mounted products.

Basic rigging plan for rope access and glass replacement



During the lifting and positioning stage of the glass replacement, the tight lines (shown in red) are tied off to an anchorage point on the ground away from the building and tensioned to create the desired angle. The glass is attached to the hauling system and lifted to the required position.

Once the glass is hauled to the correct position, the tight lines (shown in red) are slowly released, allowing the glass to slot into place while being under control at all times. Rope Access Technicians will be guiding the glass throughout the process.

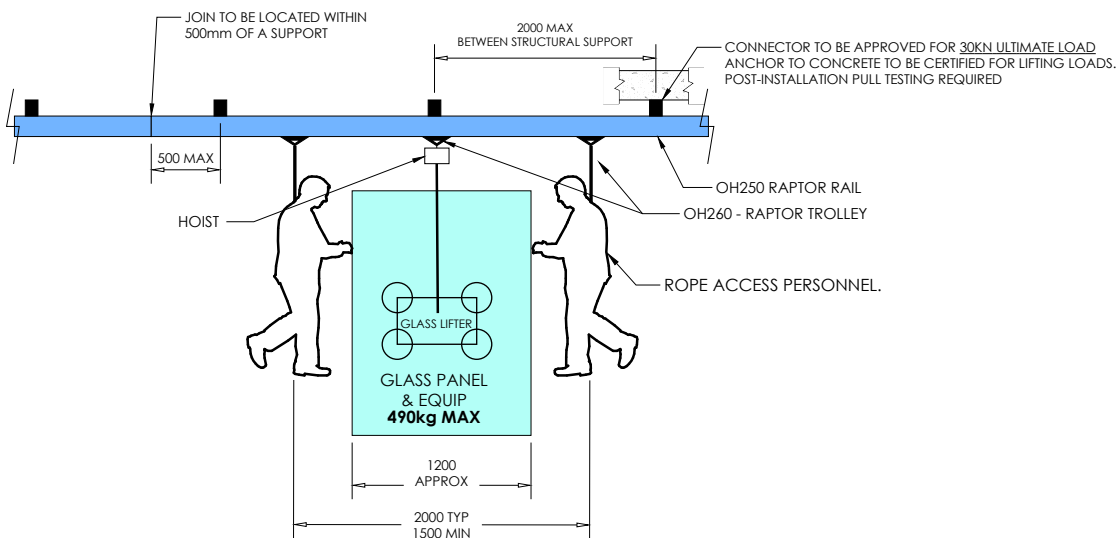


Diagrams are shown for concept only and will require specialist design by structural engineer and glazing consultants.

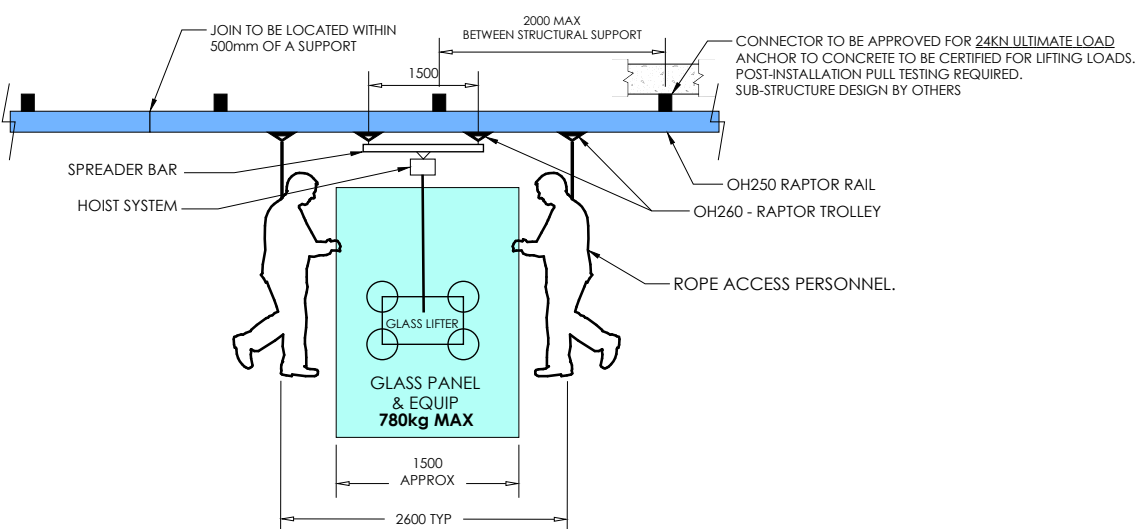
When designing a glass replacement system, the following points must be taken into account:

- Support structure for glass lifting requires a 30KN design load.
- Connection of the rail to the structure must only use proprietary Kattsafe glass lifting brackets and rail configurations as recommended.
- Maximum glass weight permissible is 780kg with load spread over 2 x rigid rail trolleys.
- Important to ensure rail spans do not exceed specified requirements.
- Users of this system must be competently trained in the safe use and maintenance of rope access systems and equipment.

Single rigid rail trolley glass lifting rated to 490kg lifting capacity



Dual rigid rail trolley glass lifting rated to 780kg lifting capacity

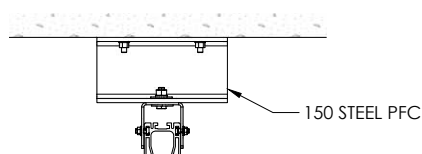


Diagrams are shown for concept only and will require specialist design by structural engineer and glazing consultants.

Rigid rail mounting for rope access and glass replacement

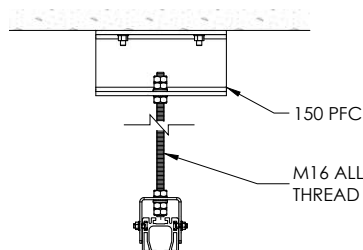
Connection of rigid rail to the structure must only use proprietary Kattsafe rigid rail glass replacement attachment brackets and the recommended fixing methods as shown below.

OH23



Bracket type	Use	Rating (kN)	Fixings to concrete
150 Steel PFC	Fall arrest	21	M12 - undercut anchor or cast-in ferrule
	Rope access	18	
	Glass lifting	24/30*	

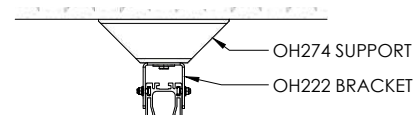
OH24



Bracket type	Use	Rating (kN)	Fixings to concrete
150 Steel PFC	Fall arrest	21	M12 - undercut anchor or cast-in ferrule
	Rope access	18	
	Glass lifting	24/30*	

Note: Suspended rail bracing not shown for clarity. All suspension systems can be used with 80mm and 130mm rigid rail.

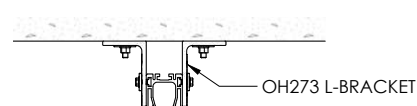
OH25



Bracket type	Use	Rating (kN)	Fixings to concrete
OH274	Fall arrest	21	M12 - undercut anchor or cast-in ferrule
	Rope access	18	

Note: Not suitable for glass lifting loads using OH274 bracket.

OH26



Bracket type	Use	Rating (kN)	Fixings to concrete
OH273	Fall arrest	21	M12 - undercut anchor or cast-in ferrule
	Rope access	18	
	Glass lifting	24/30*	

SD953 Concrete cast in ferrule

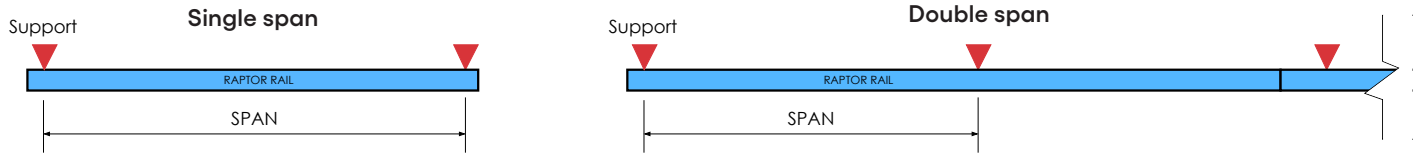
- Installed during building construction.
- Includes plastic nailing plate and reo bar.
- 30kN rated.
- Used with M16 stainless steel threaded rod to suit system.

SD960G Undercut anchor

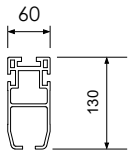
- Installed where retrofit application is required.
- 25kN rated.
- M12 x 80.
- Hot-dip galvanised.
- Suitable for tension loads.

*Check span table for lifting loads

SPAN TABLE

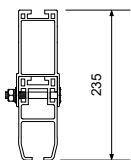


Rigid 130 rail



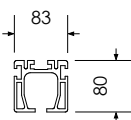
No. of users per span	Fall arrest loads			Rope access loads		
	Max span - single span (mm)	Max span - double span (mm)	Support structure design load (kN)	Max span - single span (mm)	Max span - double span (mm)	Support structure design load (kN)
1	4000	4400	15	4200	4600	12
2	3200	3600	21	3400	3800	18
3	2500	2900	27	2700	3100	24

Rigid 130 rail with longspan



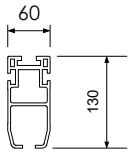
No. of users per span	Fall arrest loads		
	Max span - single span (mm)	Max span - double span (mm)	Support structure design load (kN)
1	6000	N/A	15
2	5500	N/A	21
3	4800	N/A	27

Rigid 80 rail

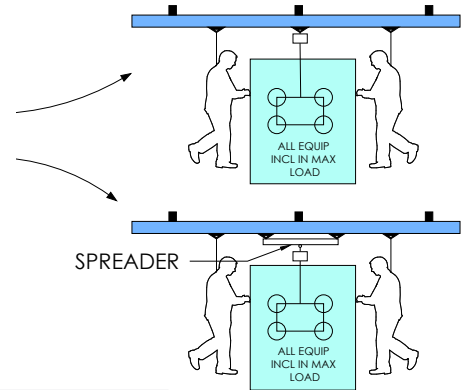


No. of users per span	Fall arrest loads			Rope access loads		
	Max span - single span (mm)	Max span - double span (mm)	Support structure design load (kN)	Max span - single span (mm)	Max span - double span (mm)	Support structure design load (kN)
1	3000	3500	15	3400	3900	12
2	2500	2900	21	2900	3300	18
3	2000	2300	27	2300	2600	24

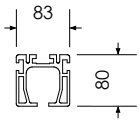
Rigid 130 rail (Lifting loads)



Glass lifting application				
No. of users per span	Max span (mm)	Max live load (kg)	Support structure design load (kN)	
2	2000	490	30	
2	2000	780 (2 x trolley with spreader)	24	



Rigid 80 rail (Lifting loads)



Glass lifting application				
No. of users per span	Max span (mm)	Max live load - single span (kg)	Max live load - double span (kg)	Support structure design load (kN)
2	2000	250	350	30
2	1800	310	430	30
2	1500	450	600	30
2	1500	1000kg (2 x trolleys with spreader)	1000kg (2 x trolleys with spreader)	24

TECHNICAL SPECIFICATION

Rigid 80 rail

OH200

Kattsafe rigid rail is designed for fall arrest, rope access and materials lifting applications in industrial and commercial environments used by persons working at heights. The system is to be designed, installed and used by Kattsafe approved partners only. The system is suitable to be connected to steel, concrete and other load bearing structures as approved by structural engineer.

Materials

- Rail: profiled hi-tensile aluminium
- Trolley: stainless steel including high performance sealed bearings
- Mounting brackets: profiled stainless and/or aluminium

Dimensions

83 x 80 mm (excluding trolley)

Weight

5.9kg/per linear metre of rail section

Fixings (refer to installation manual)

- Steel fixing: M12 bolt or threaded stud
- Concrete fixings: M12 mechanical concrete anchor
- Brackets to rail fixing: M10 x 25mm stainless steel t-bolt

Note: Fixings may vary depending on application.

Rating

- See span tables on page 20 and 21.
- Rigid rail trolley personal use: single person use at 180kg per trolley (user and equipment).
- Rigid rail trolley glass lifting: 600kg per trolley (durability trolley with load spreader beam required for loads above 600kg).
- Maximum horizontal pitch for safe use: 3°.
- Support structure integrity, suitability and fixing method to be assessed and determined by a structural engineer prior to installation.

Compliance

Kattsafe rigid rail is designed to conform with requirements of the Australian and New Zealand Standards AS/NZS 5532:2013 AS/NZS/ISO22846, AS/NZS1891, AS1418.13 and relevant codes of practices and guidelines.

Testing

Testing and performance based on requirements of Australian and New Zealand Standards AS/NZS 1891, AS/NZS 5532, AS NZS1891.2.2001 and AS/NZS1891.1:2009.

Product warranty

10 years from date of purchase subject to correct installation. Use and maintenance to be in accordance with manufacturer's specifications and recommendations. (This excludes wearing parts).

Inspection and maintenance

Inspection and certification required every 12 months by competent person in accordance with manufacturer's specifications and requirements of Australian and New Zealand Standards AS/NZS 1891 and AS/NZS 5532. (Refer installation manual).

Important note

Failure to supply and/or install proprietary product in accordance with above standards and codes, specifications and instructions voids complete system certification and/or warranty.

Rigid 130 rail

OH250

Kattsafe rigid rail is designed for fall arrest, rope access and materials lifting applications in industrial and commercial environments used by persons working at heights. The system is to be designed, installed and used by Kattsafe approved partners only. The system is suitable to be connected to steel, concrete and other load bearing structures as approved by structural engineer.

Materials

- Rail: profiled hi-tensile aluminium
- Trolley: stainless steel including 6 sealed bearings
- Mounting brackets: profiled stainless and/or aluminium

Dimensions

60 x 130 mm (excluding trolley)

Weight

4.5kg/per linear metre of rail section

Fixings (refer to installation manual)

- Steel fixing: M12 bolt or threaded stud
- Concrete fixings: M12 mechanical concrete anchor
- Brackets to rail fixing: M12 mechanical concrete anchor

Note: Fixings may vary depending on application.

Rating

- See span tables on page 20 and 21.
- Single person use: 180kg per trolley (user/equipment).
- Maximum horizontal pitch for safe use: 3°.
- Support structure integrity, suitability and fixing method to be assessed and determined by a structural engineer prior to installation.

Compliance

Kattsafe rigid rail is designed to conform with requirements of the Australian and New Zealand Standards AS/NZS 5532:2013 AS/NZS/ISO22846, AS/NZS1891, AS1418.13 and relevant codes of practices and guidelines.

Testing

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Important note

Failure to supply and/or install proprietary product in accordance with above standards and codes, specifications and instructions voids complete system certification and/or warranty.

WARRANTY INFORMATION

Warranty period on this system:
10 years from date of purchase

Should you have a warranty claim as a result of a defect the following procedure must be followed:

Identify the following information:

- The product/system name and code number.
- The date of purchase/installation.
- Installation company details.
- The installation identification number.
- The name of the company using this system.
- A description of the defect/warranty claim.
- The periodic system maintenance report.

Forward the above information to sales@kattsafe.com.au or contact technical helpline, 1300 301 755.

Terms and conditions

All warranty claims must be made in writing within 14 days of the appearance of the defect.

Incorrect installation or work done by a non accredited Kattsafe system installer will void all warranty rights.

Systems that have been installed using non proprietary equipment will void all warranties.

System roof/cladding and concrete penetration seals are not covered in this warranty.

Systems/components that have not been maintained in accordance with manufacturer's/legislative requirements will void warranty.

Systems used by incompetent persons or use with non compatible accessories ie.. harness gear, lanyards, travellers, fall arrestors etc. will void warranty.

Systems/components used for purposes other than their intended use will void warranty.

General wear and tear is expected and will depend on the frequency of use and is not covered by warranty.



Product brochure
Rigid rails



Installation manual
Rigid 80 rail



Installation manual
Rigid 130 rail



Operation manual
Rigid rail - rope access



Operation manual
Rigid rail - fall arrest



QMS Certification
ISO 9001:2015

Find all related products and resources on our website.
kattsafe.com.au

Kattsafe

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and fall protection

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