



Safetrack®

Rigid Horizontal Fall Arrest
and Safe Access



Metreel

Rigid Horizontal Fall Arrest & Safety Access

TECHNICAL

Introduction

Metreel's **Safetrack**[®] system is a rigid horizontal enclosed track system which employs a mobile anchorage device, allowing a person/persons to move freely and safely without the need to unhook/disconnect from the system.

The system comprises a fixed track installation and a mobile travelling trolley unit to be used in conjunction with personal protective equipment.

Planning

The **Safetrack**[®] system should always be installed horizontally (no incline), directly above the work area. The position of the track will be guided by the movement required by the user, the type of work being undertaken, the access to the work area and the free space available in the event of a fall.

All mounting brackets must be designed suit the structure to which they will be attached.



The **Safetrack**[®] System has been designed to comply with the Safety Standard 'EN 795' Class D - Anchor devices employing horizontal rigid anchor rails.

System Components

The **Safetrack**[®] system components are produced using mild steel and as standard are supplied in either a plain or zinc plated finish, however hot dip galvanising, powder coating, stainless steel and many other finishes can be supplied on request.

The components detailed in this brochure are a selection of the most common items used. A vast range of additional components are also available should these not suit specific requirements. In addition Metreel also offer a bespoke design service for special equipment. Utilising our in-house design department, our ability to provide solutions is second to none.

Installation

Metreel offer a comprehensive installation service and we would always recommend using our own qualified engineers, or alternatively one of our highly qualified approved installers.

When considering an installation, it is necessary to obtain full details of the site and the installation position. A site visit or copies of structural drawings will be needed to determine the extent of the installation. Metreel offer this service as part of our package.



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Mounting Centres

One of the main criteria which will determine the effectiveness of our rigid horizontal life line solution is the correct selection of mounting centres.

The following information is a guide to maximum fixing centres allowed for typical installation requirements.

Restraint - Up to 2 Persons

- 400 Profile @ 2.0 metre centres maximum

Fall Arrest - 4 Persons

(Design Load 10kn)

- 500 Profile @ 1.2 metre centres maximum
- 600 Profile @ 3.0 metre centres maximum
- 700 Profile @ 4.0 metre centres maximum

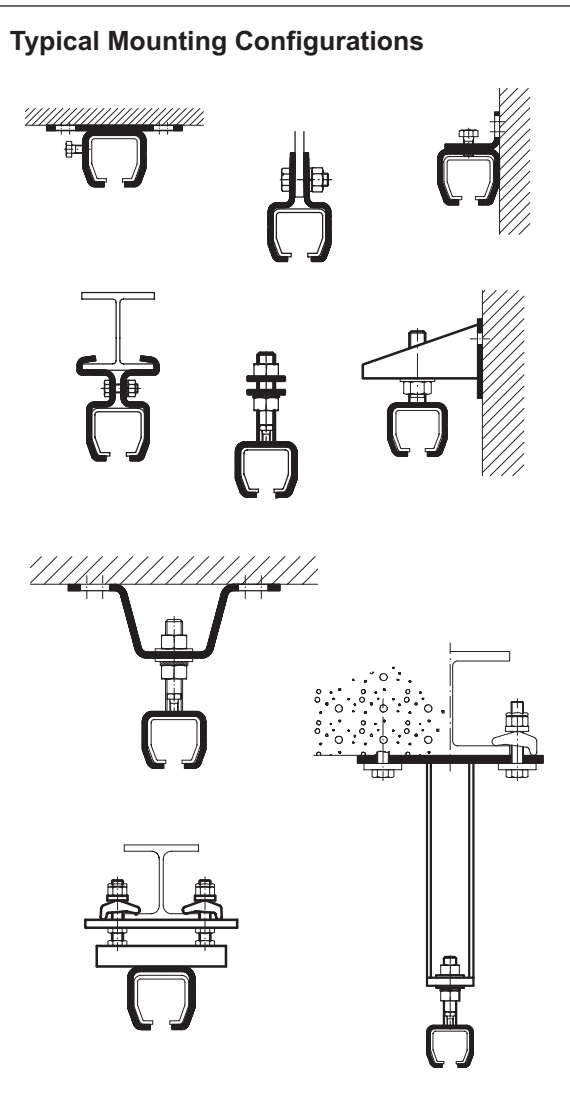
The information supplied above is a guide only and we would always recommend you discuss any requirement with our trained sales team.

For larger/wider fixing centres it is possible to utilise a track reinforcement methods similar to the illustration at the bottom of this page.

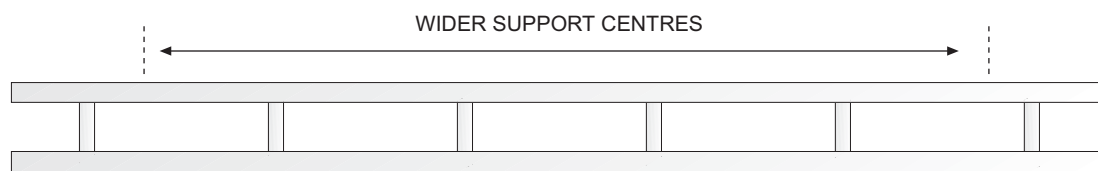
For cradle, bosun seat or abseiling applications, please refer to Metreel for track selection and fixing centre details.

All track profiles should be supported on, or directly adjacent to a splice joint, and at the apex of curved sections.

All the brackets shown in this brochure are suitable for use with the **Safetrack®** system, however consideration must be given to the structure to which they will be fixed. The following are examples of the many mounting positions that are available with the system. For applications not shown in this brochure, please consult our sales office.



Track Reinforcement Option



'VIERENDEEL' Type Reinforcement

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Laddertrack

This system is designed for the suspension and guidance of mobile ladder systems. Typical applications include cleaning and maintenance, and access to facades, large curtain walled glazing and other normally inaccessible areas.

This permanent access system can be installed both internally and externally and is available as manual travel or alternatively with powered travel. This option is usually determined by the size of the ladder system or the travel/transfer arrangements.

Laddertrack® systems can, if required be supplied with an integral fall arrest or restraint system to provide ultimate safety for personnel using the ladder. This option is so designed as not to hinder the movement of the operator, but to provide a lifeline in the event of an unexpected fall.



Cradletrack

An alternative track system ideally suited for the suspension of mobile cradles and seats.

Two track sizes are available, 600 and 700, each offering high strength, low weight and small overall dimensions. The tracks are perfect for installations where aesthetic requirements demand that the supporting track is intergrated into the building design.

The design of the profile ensures accurate wheel alignment with minimum friction, giving smooth movement when traversing the cradle or seat across the work area. The enclosed profile also protects the wheels from external damage.



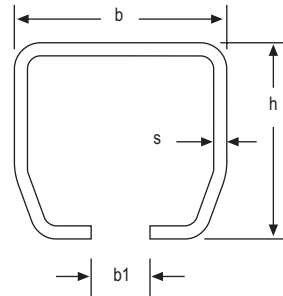
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Component Details

Track Profiles

Profile	Lengths Available	Finishes Available	Weight Kg/M	Dimensions mm			
				h	b	b1	s
400	Any length up to and including 6 metres	ZP	3.57	43.5	48.5	15	3.2
500		Plain	5.64	60	65	18	3.6
600		HDG	8.80	75	80	22	4.5
700		Painted	16.46	110	90	25	6.5



Track Curves

Safetrack® curves can be supplied bent horizontally or vertically to various radii and angles.

All curves have a 500mm straight projection at each end as standard. Longer straight projections are available to special order.

Advantages:

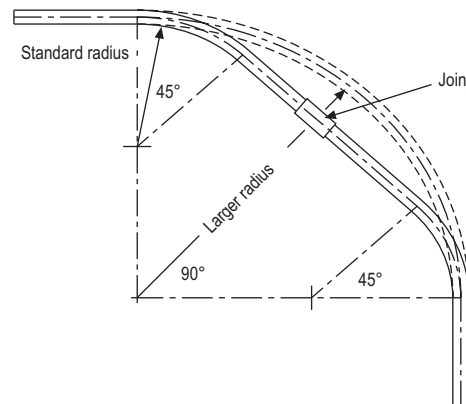
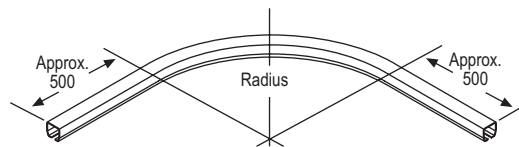
- Easy installation.
- Increased stability of the curve.
- The track joint is outside of the bend (less wear on the ball-bearings).

When planning an Access/Fall Arrest System, **STANDARD RADII** should be applied if possible.

Advantages:

- Smooth running of trolleys.
- More favourable prices and shorter delivery times. Larger radii deviating from standard sizes are more expensive to produce.

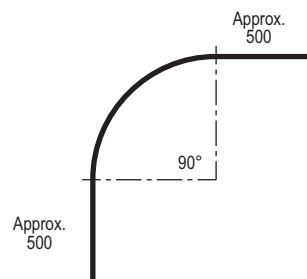
It is advisable, from an economic point of view, to use two 45° horizontally curves in standard radii rather than a large 90° horizontal curve.



Curves up to 90° Horizontal

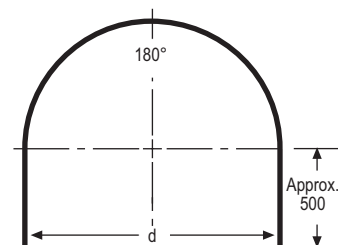
Profile	Standard Radius (mm)	Other Radii (mm)	Special Radius Made to Order
	A		B
400	610 ± 15	-	From 1300mm
500	605 ± 15	875 ± 15	From 1300mm
600	790 ± 20	-	From 1300mm
700	1035 ± 20	-	From 1500mm

Radii between **A** and **B** types are not available unless otherwise stated.



Curves up to 180° Horizontal

Profile	Standard Measurement "d" approx. (mm)
400	1220 ± 15
500	1210 ± 15
600	1580 ± 20
700	2070 ± 20



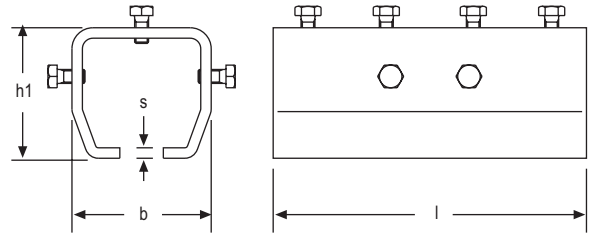
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Component Details

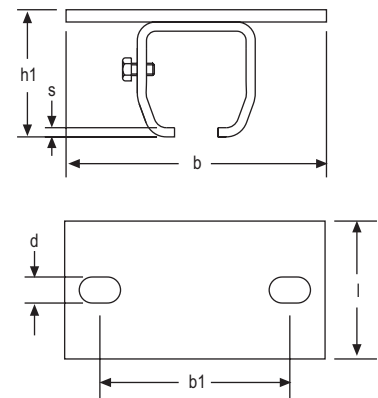
Splice Joints

Part No	To Suit Profile	Finishes Available	Weight Kg	Dimensions mm			
				h1	b	s	l
1403	400	ZP Plain HDG Painted	1.0	54	60	4.5	150
1503	500		2.1	75	80	6	180
1603	600		3.8	94	100	8	200
1703	700		7.6	134	114	10	250



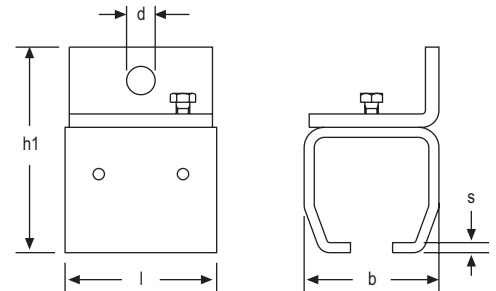
Ceiling Support Brackets

Part No	To Suit Profile	Finishes Available	Weight Kg	Dimensions mm					
				h1	b	b1	s	l	d
402	400	ZP Plain HDG Painted	0.65	59.5	130	94	4.5	60	13
502	500		1.55	81	170	124	6	80	17
602	600		3.55	104	210	148	8	100	22
702	700		6.25	146	260	178	10	120	22



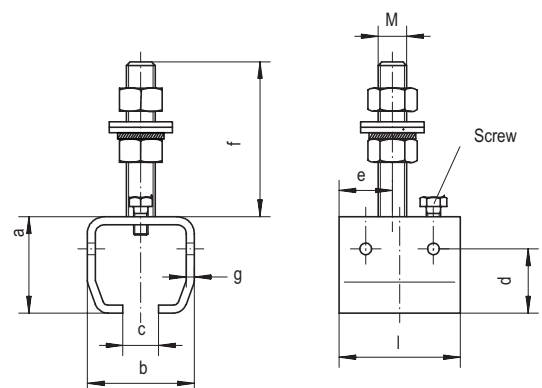
Wall Support Brackets

Part No	To Suit Profile	Finishes Available	Weight Kg	Dimensions mm				
				h1	b	s	l	d
401	400	ZP Plain HDG Painted	0.6	94	60	4.5	68	13
501	500		1.35	123	80	6	90	17
601	600		3.00	157	100	8	110	22
701	700		4.70	210	114	10	120	26



Adjustable Support Brackets

Part No	Dimensions mm									
	a	b	c	d	e	f	M	g	l	Screw
404	54	60	20	36	30	87	M16	4.5	68	M8
504	75	80	25	47	41.5	133	M20	6	90	M8
604	94	100	32	50	48	133	M20	8	110	M10
704	134	114	38	84	45	189	M30	10	120	M12



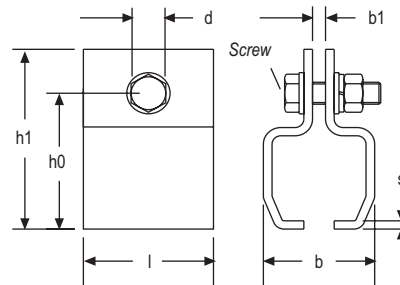
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Component Details

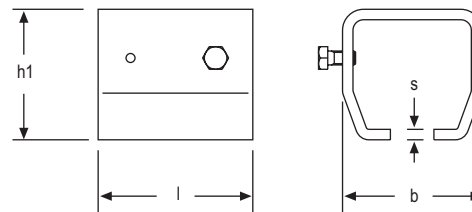
Flat Plate Clamp Support Brackets

Part No	To Suit Profile	Finishes Available	Weight Kg	Dimensions mm							
				h0	h1	b	b1	s	l	d	Screw
1408	400	ZP	0.45	69	97	56.5	8	4	55	13	M12
1508	500	Plain	1.40	93	131	77	10	6	90	17	M16
1608	600	HDG	2.70	111	151	96	10	8	110	17	M16
1708	700	Painted	4.25	150	192	110	16	10	120	17	M16



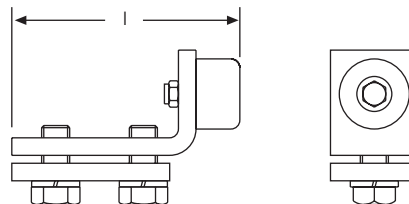
Plain Support Brackets (For Welding)

Part No	To Suit Profile	Finishes Available	Weight Kg	Dimensions mm			
				h1	b	s	l
1404	400	Plain Steel	0.40	54	60	4.5	68
1504	500		0.95	75	80	6	90
1604	600		2.05	94	100	8	110
1704	700		3.50	134	114	10	120



End Stops

Part No	To Suit Profile	Finishes Available	Weight Kg	Dimensions mm
				l
1400P	400	ZP	0.25	50
1500P	500	Plain	0.25	50
1600P	600	HDG	1.30	130
1700P	700	Painted	1.30	130



Dead Stops

Part No	To Suit Profile
400EB	400
500EB	500
600EB	600
700EB	700

With ALL **Safetrack**® Safety / Access Systems, there must be an additional Dead-Bolt fitted to the rear of the end stop, and through the width of the Track Profile as a Secondary Safety Device.



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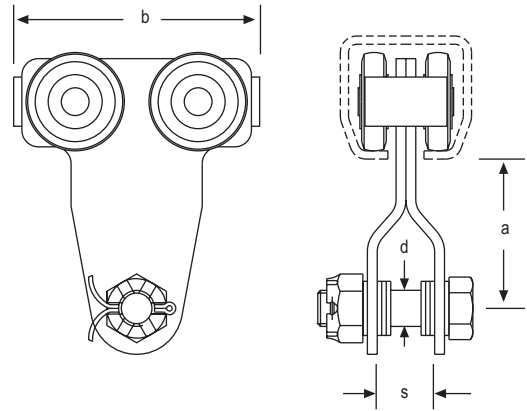
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Component Details

S1016 Fall Arrest Trolleys

Part No	To Suit Profile	Finishes Available	Weight Kg	Dimensions mm			
				a	b	d	s
S1016-07	400	ZP	-	65	100	22	30
S1016-01	500		-	76	130	25	35
S1016-02	600		-	91.5	150	22	35
S1016-06	700		-	117	214	25	45

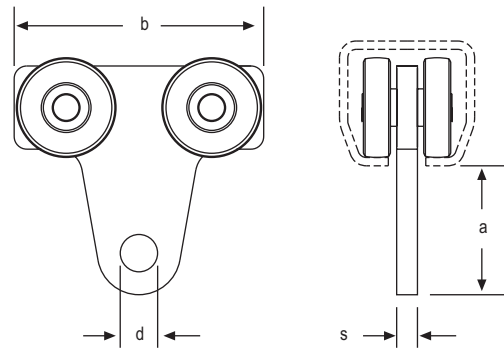
This trolley is recommended for all applications, including Fall Arrest, where possible.



Type 10 Fall Arrest Trolleys

Part No	To Suit Profile	Finishes Available	Weight Kg	Dimensions mm			
				a	b	d	s
1410	400	ZP	0.6	54	100	14	8
1510	500		1.4	60	120	18	10
1610	600		2.25	69	145	22	12
1710	700		6.5	100	210	26	15

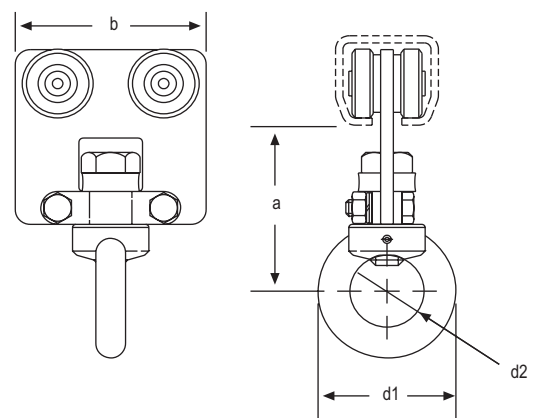
This trolley is suitable for applications where it is preferable to attach directly with a carabiner.



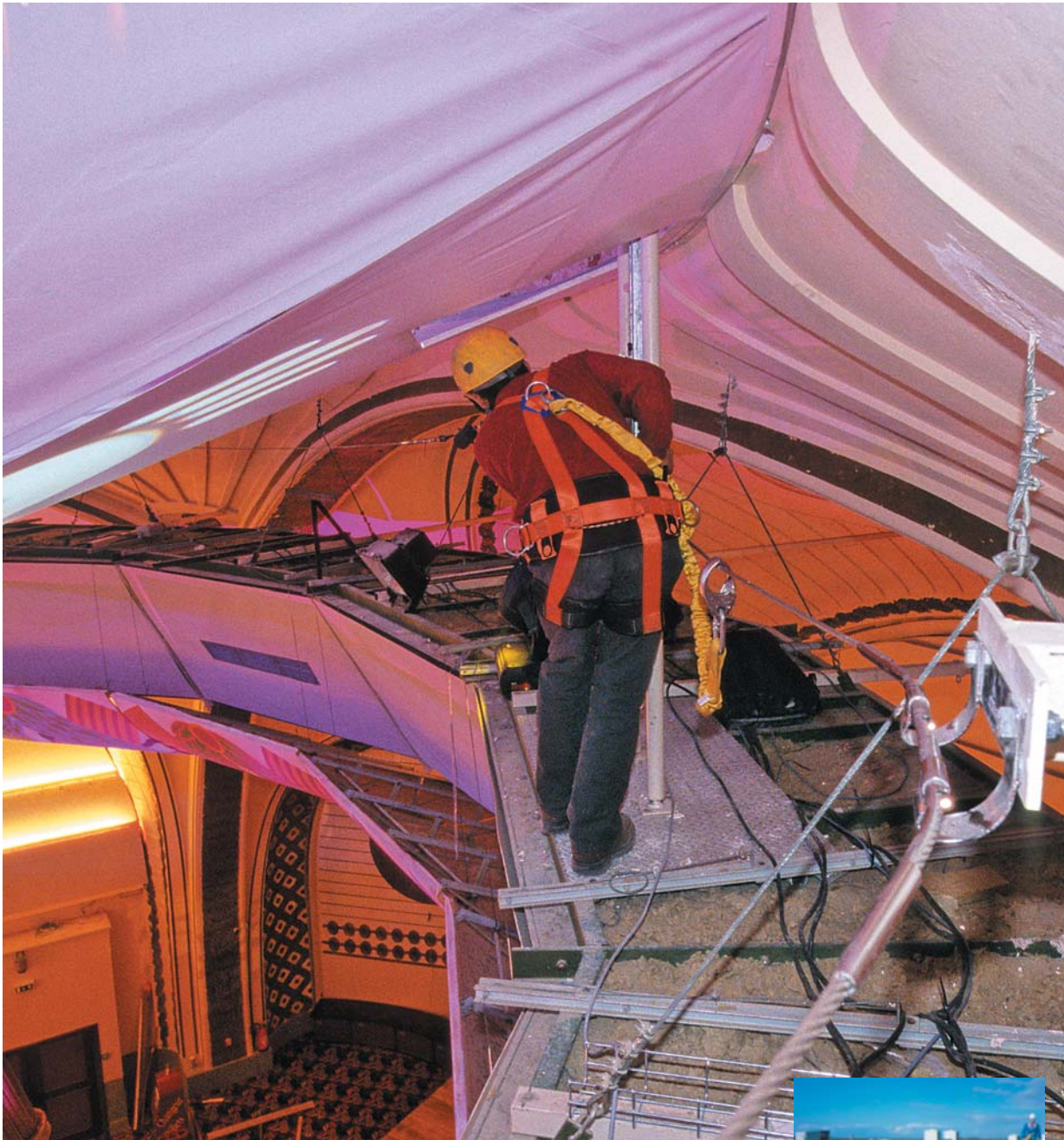
Type Ri Fall Arrest Trolleys for Special Mounting

Part No	To Suit Profile	Finishes Available	Weight Kg	Dimensions mm			
				a	b	d1	d2
424Ri	400	ZP	-	76.5	90	63	35
524Ri	500		2.6	93	110	72	40
624Ri	600		5.4	123	150	90	50
724Ri	700		8.2	163	200	108	60

This trolley is suitable for applications where it is desirable to have a rotating suspension point.



Flexible Horizontal Fall Arrest & Safety Access

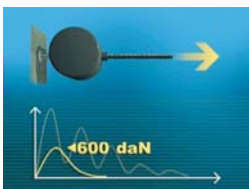


HORIZON®

The **HORIZON®** fall arrest system offers outstanding adaptability. Each system is assembled from components designed to operate horizontally, on flat or inclined surfaces and around bends.



HORIZON® can be fitted to new buildings and structures or retrofitted to existing ones. It is suitable for applications as diverse as bridges, towers, office blocks, manufacturing plants, entertainment arenas and offshore platforms. **HORIZON®** is a proven durable and reliable system



Unique to the industry, the **HORIZON®** shock absorber has the most advanced mechanism in terms of safety and comfort in the event of a fall. The forces transmitted to the ends of the lifeline never exceed 6kN and therefore minimises the impact to which it is attached. The system is suitable for use by 4 persons at one time.





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