



GRAVITY

ACCESS (PTY) LTD

ACCESS SYSTEMS
OVERVIEW



INDEX

1. ROPE ACCESS SYSTEMS:	
1.1 Single Point Anchors	p4
1.2 Pop-up Anchors	p5
1.3 Securail Pro.....	p6
1.4 Safeaccess Rail	p7
1.5 Climbing Rail	p8
1.6 Davit Arm.....	p9
1.7 Mobile Davit Arm.....	p10
2. FALL ARREST SYSTEMS:	
2.1. Single Point Anchors	p12
2.2. Pop-up Anchors	p13
2.3. Fall Arrest Lifelines	p14
2.4. Fall Arrest Rails.....	p15



ROPE ACCESS SYSTEMS

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SINGLE POINT ANCHORS

SYSTEM FEATURES

POSSIBLE LOCATIONS
Floor, wall or overhead (soffit)

ADVANTAGES	
Building Design	Can accommodate most façade shapes (incorporating little or no vertical variation)
Use	Familiar as a standard anchor system to the average Rope Access technician

DISADVANTAGES	
Use	Additional edge protection may be needed during use
Relative Inherent Risk	Moving between anchors (for repositioning) requires connecting and disconnecting repeatedly - higher risk exposure for users
Rescue	Rescues may be complex
Potential Abuse	Open to abuse - e.g. as rigging lugs for lifting purposes

COST FEATURES

SHORT-TERM (INITIAL INVESTMENT / CAPITAL EXPENDITURE)
<ul style="list-style-type: none"> • Cost-effective installation - low initial investment • Provided that access to the area is easy, installation is relatively quick and cost effective

LONGER-TERM (RECERTIFICATION AND MAINTENANCE / IMPLICATION FOR USE OF SYSTEM)
<ul style="list-style-type: none"> • Some types of installations (such as aid anchors) can be slow and relatively costly to inspect and certify annually • Aid anchors are slow to move around on - setup and work pace is slow, potentially increasing cleaning and maintenance costs

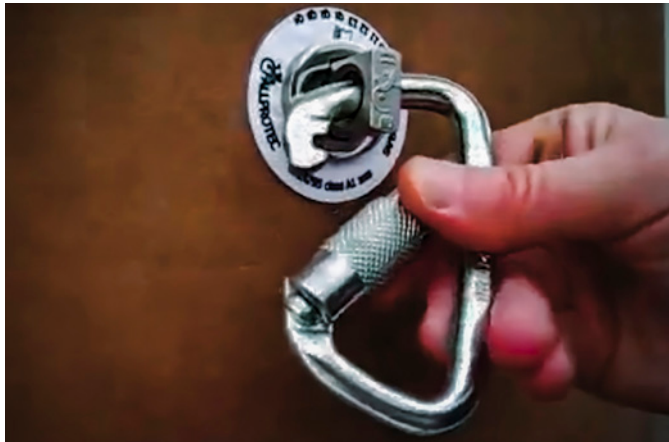


POP-UP ANCHOR

SYSTEM FEATURES

POSSIBLE LOCATIONS

Floor, wall or overhead (soffit)



ADVANTAGES

Building Design	Can accommodate most façade shapes (incorporating little or no vertical variation)
	Anchor can be concealed for more appealing aesthetic finish
Use	Familiar as a standard anchor system to the average Rope Access technician

DISADVANTAGES

Building Design	Can only be placed in good quality non-cracked concrete
	Large diameter holes are required - potential for interfering with reinforcing or PT cables
Relative Inherent Risk	Moving between anchors (for repositioning) requires connecting and disconnecting repeatedly - higher risk exposure for users
Rescue	Rescues may be complex
Potential Abuse	Open to abuse - e.g. as rigging lugs for lifting purposes

COST FEATURES

SHORT-TERM (INITIAL INVESTMENT / CAPITAL EXPENDITURE)

- Relatively costly installation - higher initial investment
- Larger diameter holes are required - takes more time to install

LONGER-TERM (RECERTIFICATION AND MAINTENANCE / IMPLICATION FOR USE OF SYSTEM)

- Some types of installations (such as aid anchors) can be slow and relatively costly to inspect and certify annually
- Aid anchors are slow to move around on - setup and work pace is slow, potentially increasing cleaning and maintenance costs

SECURAIL PRO

SYSTEM FEATURES

POSSIBLE LOCATIONS

Floor, wall or overhead (soffit)



ADVANTAGES

Building Design	Can accommodate most façade shapes (incorporating little or no vertical variation)
	The system can be semi-concealed or incorporated as design feature for a more appealing aesthetic finish
Use	Quick and easy to move and position on and along the system.
	No connecting and disconnecting of safety attachments to move along the system
Relative Inherent Risk	Low risk exposure for users - no need to disconnect and reconnect during use
Rescue	Easier to execute rescues

DISADVANTAGES

Installation	Longer lead times on materials
Use	Induction training is required before users may use the system
Potential Abuse	Open to abuse - e.g. as rigging system for lifting purposes



COST FEATURES

SHORT-TERM (INITIAL INVESTMENT / CAPITAL EXPENDITURE)

- Relatively costly installation - higher initial investment

LONGER-TERM (RECERTIFICATION AND MAINTENANCE / IMPLICATION FOR USE OF SYSTEM)

- Annual inspection fairly quick and cost effective
- Users can use and move along the system fast and efficiently, making for faster, more cost effective works (i.e. savings on cleaning and maintenance work)



SAFEACCESS RAIL

SYSTEM FEATURES

POSSIBLE LOCATIONS
Floor, wall or overhead (soffit)

ADVANTAGES	
Building Design	Can accommodate most façade shapes (incorporating little or no vertical variation)
	System can be concealed (cast in concrete) or incorporated as design feature for a more appealing aesthetic finish
Use	Heavy duty suspension rail with high load capacity
	Can be used with suspended access platform
	Quick and easy to move and position on and along the system
	No connecting and disconnecting of safety attachments to move along the system
Relative Inherent Risk	Low risk exposure for users - no need to disconnect and reconnect during use
Rescue	Easier to execute rescues

DISADVANTAGES	
Installation	Longer lead times on materials
Use	Induction training is required before users may use the system
Potential Abuse	Open to abuse - e.g. as rigging system for lifting purposes



COST FEATURES

SHORT-TERM (INITIAL INVESTMENT / CAPITAL EXPENDITURE)
<ul style="list-style-type: none"> Relatively costly installation - higher initial investment

LONGER-TERM (RECERTIFICATION AND MAINTENANCE / IMPLICATION FOR USE OF SYSTEM)
<ul style="list-style-type: none"> Annual inspection fairly quick and cost effective Users can use and move along the system fast and efficiently, making for faster, more cost effective works (i.e. savings on cleaning and maintenance work) System load capacity is higher, with potential for use during façade maintenance



CLIMBING RAIL



SYSTEM FEATURES

POSSIBLE LOCATIONS	
Wall or overhead (soffit)	

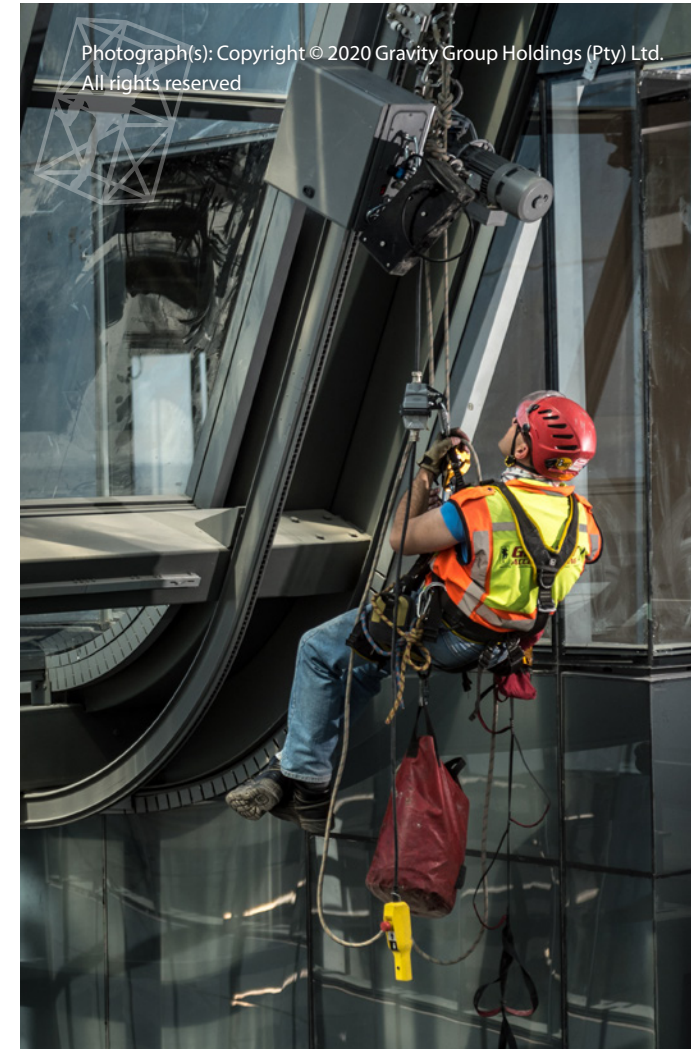
DISADVANTAGES	
Installation	Longer lead times on materials
Use	Induction training is required before users may use the system
Potential Abuse	Open to abuse - e.g. as rigging system for lifting purposes

ADVANTAGES	
Building Design	Can accommodate most façade shapes (incorporating up to 70% vertical incline)
	System can be concealed (cast in concrete) or incorporated as design feature for a more appealing aesthetic finish
Use	Heavy duty suspension rail with high load capacity
	Can be used with suspended access platform
	Quick and easy to move and position on and along the system
	No connecting and disconnecting of safety attachments to move along the system
Relative Inherent Risk	Low risk exposure for users - no need to disconnect and reconnect during use
Rescue	Easier to execute rescues

COST FEATURES

SHORT-TERM (INITIAL INVESTMENT / CAPITAL EXPENDITURE)
<ul style="list-style-type: none"> Relatively costly installation - higher initial investment

LONGER-TERM (RECERTIFICATION AND MAINTENANCE / IMPLICATION FOR USE OF SYSTEM)
<ul style="list-style-type: none"> Annual inspection fairly quick and cost effective Users can use and move along the system fast and efficiently, making for faster, more cost effective works (i.e. savings on cleaning and maintenance work) System load capacity is higher, with potential for use during façade maintenance



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SYSTEM FEATURES

POSSIBLE LOCATIONS	
Floor	

ADVANTAGES	
Building Design	Obstacles like non-trafficable coping or exposed/proud facades can be successfully navigated
	Can accommodate most façade shapes (includes facades that incorporate inclined surfaces)
	Davit Arm can be concealed by storing out of sight for a more appealing aesthetic finish
Use	Single base can cover a relatively wide area (around 2.5m), instead of having multiple single point anchors
	Single arm can be used on multiple bases
	Relative light weight aluminium

DISADVANTAGES	
Building Design	More than one base is generally required to cover access for a façade
Use	Setup requires user to attach to the system and ascend from the bottom
	Induction training is required before users may use the system
Relative Inherent Risk	Moving arms between bases (for repositioning) requires connecting and disconnecting repeatedly - higher risk exposure for users
Storage	Storage is required for the Davit Arm
Potential Abuse	Open to abuse - e.g. as rigging system for lifting purposes
Rescue	Rescues may be complex

COST FEATURES

SHORT-TERM (INITIAL INVESTMENT / CAPITAL EXPENDITURE)

- Relatively costly installation - higher initial investment

LONGER-TERM (RECERTIFICATION AND MAINTENANCE / IMPLICATION FOR USE OF SYSTEM)

- Annual inspection fairly cost effective
- Setup and moving of one system requires at least two persons - potentially relatively slow and costly



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MOBILE DAVIT ARM

SYSTEM FEATURES

POSSIBLE LOCATIONS	
Floor	
ADVANTAGES	
Building Design	Obstacles like non-trafficable coping or exposed/proud facades can be successfully navigated
	Can accommodate most façade shapes (includes facades that incorporate inclined surfaces)
	Davit Arm can be concealed by storing out of sight for a more appealing aesthetic finish
	No permanently installed base plates are required
Use	Single base can cover a relatively wide area (around 2.5m), instead of having multiple single point anchors
	Single system can potentially provide access to entire façade for one person

DISADVANTAGES	
Building Design	Requires a clear, flat, level roof surface with minimum 800kg load capacity, that is free from obstacles, in order to move the system around
	Depending on layout of roof, more than one system may be required
Use	Setup requires user to attach to the system and ascend from the bottom
	Relative heavy weight of the system when moving it between positions
	Induction training is required before users may use the system
Relative Inherent Risk	Moving system between positions requires connecting and disconnecting repeatedly - higher risk exposure for users
Storage	Storage is required for the Davit Arm
Potential Abuse	Open to abuse - e.g. as rigging system for lifting purposes
Rescue	Rescues may be complex

COST FEATURES

SHORT-TERM (INITIAL INVESTMENT / CAPITAL EXPENDITURE)

- Relatively costly installation - higher initial investment

LONGER-TERM (RECERTIFICATION AND MAINTENANCE / IMPLICATION FOR USE OF SYSTEM)

- Annual inspection fairly cost effective
- Setup and moving of one system requires at least two persons - potentially relatively slow and costly



FALL ARREST SYSTEMS

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SINGLE POINT ANCHORS

SYSTEM FEATURES

POSSIBLE LOCATIONS

Floor, wall or overhead (soffit)

ADVANTAGES

Building Design	Can accommodate most façade shapes (incorporating little or no vertical variation)
Use	Familiar as a standard anchor system to the average Fall Arrest technician

DISADVANTAGES

Use	May require the use of edge resistant PPE
Relative inherent risk	Moving between anchors (for repositioning) requires connecting and disconnecting repeatedly - higher risk exposure for users
Potential abuse	Open to abuse - e.g. as rigging lugs for lifting purposes
Rescue	Rescues may be complex

COST FEATURES

SHORT-TERM (INITIAL INVESTMENT / CAPITAL EXPENDITURE)

- Cost-effective installation - low initial investment (lifelines may be more cost effective for larger areas)
- Provided that access to the area is easy, installation is relatively quick and cost effective

LONGER-TERM (RECERTIFICATION AND MAINTENANCE / IMPLICATION FOR USE OF SYSTEM)

- Cost effective to inspect and certify annually



POP-UP ANCHOR

SYSTEM FEATURES

POSSIBLE LOCATIONS

Floor, wall or overhead (soffit)

ADVANTAGES

Building Design

Can accommodate most façade shapes (includes facades that incorporate inclined surfaces)

Anchor can be concealed for more appealing aesthetic finish

Use

Familiar as a standard anchor system to the average Fall Arrest technician

DISADVANTAGES

Building Design

Can only be placed in good quality non-cracked concrete

Large diameter holes are required - potential for interfering with reinforcing or PT cables

Use

May require the use of edge resistant PPE

Relative Inherent Risk

Moving between anchors (for repositioning) requires connecting and disconnecting repeatedly - higher risk exposure for users

Potential Abuse

Open to abuse - e.g. as rigging lugs for lifting purposes

Rescue

Rescues may be complex

COST FEATURES

SHORT-TERM (INITIAL INVESTMENT / CAPITAL EXPENDITURE)

- Relatively costly installation - higher initial investment

LONGER-TERM (RECERTIFICATION AND MAINTENANCE / IMPLICATION FOR USE OF SYSTEM)

- Cost effective to inspect and certify annually





SYSTEM FEATURES

POSSIBLE LOCATIONS

Floor, wall or overhead (soffit)



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ADVANTAGES

Building Design	Can accommodate most façade shapes (includes facades that incorporate inclined surfaces)
Use	Familiar as a standard anchor system to the average Fall Arrest technician
	Quick and easy to move and position on and along the system
	No connecting and disconnecting of safety attachments to move along the system
Relative Inherent Risk	Low risk exposure for users - no need to disconnect and reconnect during use

DISADVANTAGES

Potential Abuse	Open to abuse - e.g. as rigging point for lifting purposes, or as rope access anchor system
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COST FEATURES

SHORT-TERM (INITIAL INVESTMENT / CAPITAL EXPENDITURE)

- Relatively costly installation - higher initial investment (single point anchors may be more cost effective for smaller areas)

LONGER-TERM (RECERTIFICATION AND MAINTENANCE / IMPLICATION FOR USE OF SYSTEM)

- Annual inspection fairly quick and cost effective
- Users can use and move along the system fast and efficiently, making for faster, more cost effective works (i.e. savings on cleaning and maintenance work)



FALL ARREST RAILS



SYSTEM FEATURES

POSSIBLE LOCATIONS
Floor, wall or overhead (soffit)

DISADVANTAGES	
Potential Abuse	Open to abuse - e.g. as rigging point for lifting purposes
Rescue	Rescues may be complex

ADVANTAGES	
Building Design	Can accommodate most façade shapes (includes facades that incorporate inclined surfaces)
Use	Familiar as a standard anchor system to the average Fall Arrest technician
	Quick and easy to move and position on and along the system
	No connecting and disconnecting of safety attachments to move along the system
Relative Inherent Risk	Low risk exposure for users - no need to disconnect and reconnect during use

COST FEATURES

SHORT-TERM (INITIAL INVESTMENT / CAPITAL EXPENDITURE)
<ul style="list-style-type: none"> Relatively costly installation - higher initial investment (single point anchors may be more cost effective for smaller areas)

LONGER-TERM (RECERTIFICATION AND MAINTENANCE / IMPLICATION FOR USE OF SYSTEM)
<ul style="list-style-type: none"> Annual inspection fairly quick and cost effective Users can use and move along the system fast and efficiently, making for faster, more cost effective works (i.e. savings on cleaning and maintenance work)

