



**GRAVITY**

GLOBAL (PTY) LTD

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ACCESS SYSTEMS  
***OVERVIEW***



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# ***ROPE ACCESS SYSTEMS***

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# SINGLE POINT ANCHORS



## SYSTEM FEATURES

<b>POSSIBLE LOCATIONS</b>
Floor, wall or overhead (soffit)

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

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

## COST FEATURES

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

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

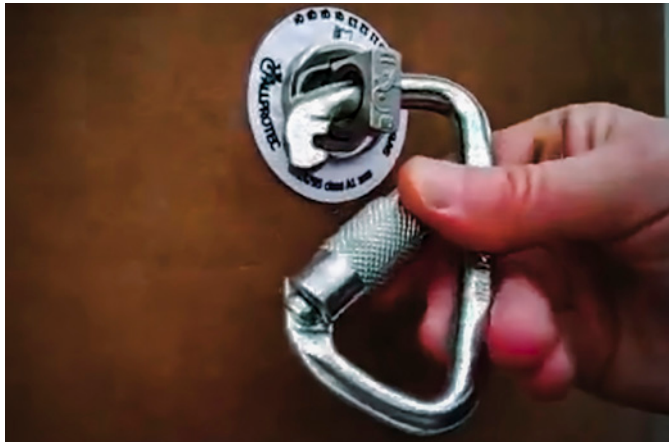


# POP-UP ANCHOR

## SYSTEM FEATURES

### POSSIBLE LOCATIONS

Floor, wall or overhead (soffit)



### ADVANTAGES

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

### DISADVANTAGES

<b>Building Design</b>	Can only be placed in good quality non-cracked concrete
	Large diameter holes are required - potential for interfering with reinforcing or PT cables
<b>Relative Inherent Risk</b>	Moving between anchors (for repositioning) requires connecting and disconnecting repeatedly - higher risk exposure for users
<b>Rescue</b>	Rescues may be complex
<b>Potential Abuse</b>	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)



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### ADVANTAGES

<b>Building Design</b>	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
<b>Use</b>	Quick and easy to move and position on and along the system.
	No connecting and disconnecting of safety attachments to move along the system
<b>Relative Inherent Risk</b>	Low risk exposure for users - no need to disconnect and reconnect during use
<b>Rescue</b>	Easier to execute rescues

### DISADVANTAGES

<b>Installation</b>	Longer lead times on materials
<b>Use</b>	Induction training is required before users may use the system
<b>Potential Abuse</b>	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)

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

ADVANTAGES	
<b>Building Design</b>	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
<b>Use</b>	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
<b>Relative Inherent Risk</b>	Low risk exposure for users - no need to disconnect and reconnect during use
<b>Rescue</b>	Easier to execute rescues



## COST FEATURES

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

LONGER-TERM (RECERTIFICATION AND MAINTENANCE / IMPLICATION FOR USE OF SYSTEM)
<ul style="list-style-type: none"> <li>Annual inspection fairly quick and cost effective</li> <li>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)</li> <li>System load capacity is higher, with potential for use during façade maintenance</li> </ul>



# CLIMBING RAIL



## SYSTEM FEATURES

POSSIBLE LOCATIONS	
Wall or overhead (soffit)	

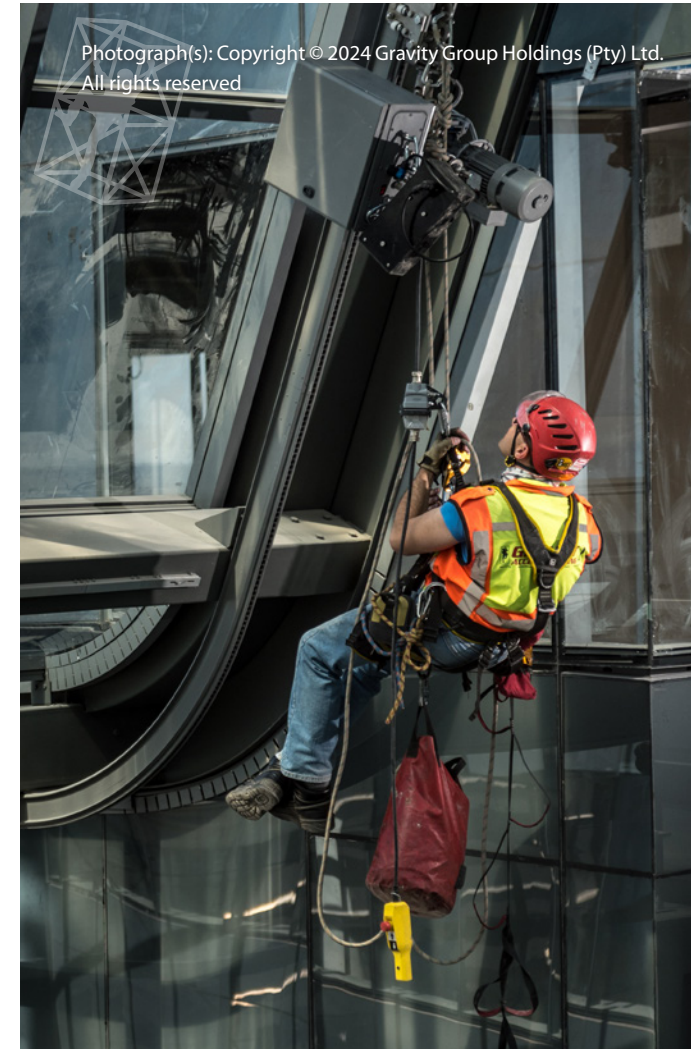
DISADVANTAGES	
<b>Installation</b>	Longer lead times on materials
<b>Use</b>	Induction training is required before users may use the system
<b>Potential Abuse</b>	Open to abuse - e.g. as rigging system for lifting purposes

ADVANTAGES	
<b>Building Design</b>	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
<b>Use</b>	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
<b>Relative Inherent Risk</b>	Low risk exposure for users - no need to disconnect and reconnect during use
<b>Rescue</b>	Easier to execute rescues

## COST FEATURES

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

LONGER-TERM (RECERTIFICATION AND MAINTENANCE / IMPLICATION FOR USE OF SYSTEM)
<ul style="list-style-type: none"> <li>Annual inspection fairly quick and cost effective</li> <li>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)</li> <li>System load capacity is higher, with potential for use during façade maintenance</li> </ul>



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## SYSTEM FEATURES

POSSIBLE LOCATIONS	
Floor	

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

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

### DISADVANTAGES

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



# FALL ARREST LIFELINES



## SYSTEM FEATURES

### POSSIBLE LOCATIONS

Floor, wall or overhead (soffit)



### ADVANTAGES

<b>Building Design</b>	Can accommodate most façade shapes (includes facades that incorporate inclined surfaces)
<b>Use</b>	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
<b>Relative Inherent Risk</b>	Low risk exposure for users - no need to disconnect and reconnect during use

### DISADVANTAGES

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

ADVANTAGES	
<b>Building Design</b>	Can accommodate most façade shapes (includes facades that incorporate inclined surfaces)
<b>Use</b>	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
<b>Relative Inherent Risk</b>	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"> <li>Relatively costly installation - higher initial investment (single point anchors may be more cost effective for smaller areas)</li> </ul>

LONGER-TERM (RECERTIFICATION AND MAINTENANCE / IMPLICATION FOR USE OF SYSTEM)
<ul style="list-style-type: none"> <li>Annual inspection fairly quick and cost effective</li> <li>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)</li> </ul>

