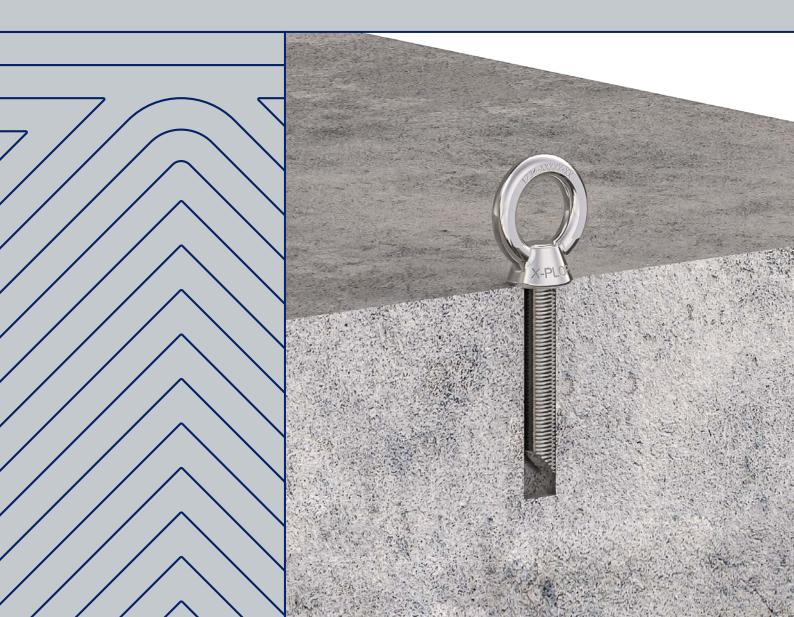




**OPERATION MANUAL** 

# FALL ARREST ANCHORS



Kattsafe concrete fall arrest anchors for personnel working concrete surfaces at heights close to fall edges.



**Installation manual**Concrete mount anchors



**Operation manual** Fall arrest anchors

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

### 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.

For more information please contact Kattsafe. kattsafe.com.au

- 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



### FALL ARREST ANCHOR RANGE

AP118 Raised concrete mount anchor



AP124 Through bolt anchor



AP125A Concrete mount anchor



AP125S Swivel concrete mount anchor



AP126 Concrete mount anchor with torque indicator



AP127 Concrete mount anchor kit



### AP129A Concrete cast-in anchor



AP129A Concrete cast-in anchor with threaded rod



## OPERATION REQUIREMENTS

#### Must be read prior to use

- Prior to use, ensure all operating procedures have been read and properly understood.
- 2. This fall arrest system is only to be used by competent persons who have experience and training in the safe use of the system and associated equipment.
- Ensure all workplace WHS requirements are identified and understood.
- A risk assessment with a safe work method procedure must be completed and approved by management prior to work commencing.
- This system requires periodic inspection and maintenance by a qualified height safety inspector. The system MUST NOT be used if the service date is overdue.
- 6. A rescue plan must be formulated and ready for implementation prior to using any fall arrest system.
- 7. Authorisation to access any risk area must be obtained from the person in control of the workplace.
- 8. Only approved full body harness, gear and equipment with an energy absorber certified to Australian Standard AS/NZS 1891 is to be used with this system.
- Visually inspect the system for damage prior to use. The system must not be used if there is any deterioration or deformation of components or the structure to which the system is attached.
- 10. When using the Kattsafe removable eyebolt, a minimum of 20mm embedment or 10 full turns is required.
- If the safety system is damaged or has arrested a fall, discontinue use until it has been fully inspected and recertified by a competent height safety equipment inspector.
- Ensure all fixings, fittings and components are securely attached. Any tightening, adjustment or replacement of components must be carried out by a competent height safety inspector.
- Persons must not be allowed to work alone in fall arrest situations in case emergency rescue assistance or first aid is required.
- 14. All applicable Australian Standards, WHS Acts & Regulations, and Codes of Practice & Guidelines must be read and obeyed when using this safety system.
- 15. The reading of this operation manual does not replace the need for completing a recognised height safety training course by a Registered Training Organisation (RTO).



Failure to follow all warnings, operation and maintenance instructions may result in serious injury or death.

### SYSTEM LIMITATIONS

#### Must be read prior to use

- The Kattsafe concrete mount anchor is suitable for single person use and rescue in the case of a fall incident. (15kN)
- Only to be used by competent persons with proof of training by a Registered Training Organisation (RTO) in the use of height safety and fall protection systems.
- 3. This anchor must not be used if it is passed the due service date.
- Harness gear is susceptible to deterioration when exposed to chemicals or hazardous environments and must be approved by the manufacturer for use in these applications.
- Operators of this system must be connected via a lanyard with a personal energy absorber, in accordance to Australian Standard AS/NZS 1891.1.
- This anchor is only intended for single person fall arrest use. This anchor is not suitable for abseil use.
- 7. Where slopes exceed 40°, Kattsafe recommends that the Kattsafe rope access range of anchors are used for this application when using a work positioning system with a safety rope line.
- Do not exceed maximum number of users/persons per system. See specific system data plate for user configuration.
- 9. Do not tamper with system components.
- This system is not to be used for tethering or lifting machinery or equipment.
- 11. The safety system must be recertified by a competent height safety inspector as recommended:
  - Non corrosive/mild environment
  - 12 monthly corrosive/harsh environment
  - 6 monthly (more frequent inspection may be required)



Kattsafe recommends that persons using fall arrest systems do not work alone in case of an emergency and help is required. Should any part of the system/ equipment have been subjected to abnormal loading, use must be discontinued until replaced/recertified by a competent height safety inspector.

### **SAFE USE PROCEDURE**

### Step 1

Ensure a full body harness and suitable rope line lanyard is used with this system.

Harness gear must be certified to Australian Standards AS/NZ 1981.1:2009. Harness gear must be used with a tear-web energy absorbing lanyard connected to fall arrest point of Harness.

### Step 3

Inspect anchorage device for any damage or deterioration and check the device has been serviced and recertified.



Do not use if current date exceeds service date.



Approach anchorage system from a 'Safe Zone' i.e. no risk of fall or injury.



### Step 4

Attach rope line lanyard to anchorage device and adjust rope line length evenly in the shortest distance to the fall edge.



Ensure there is no slack in rope line.





### Step 5

Ensure there is NO possibility of a pendulum fall from the fall edge

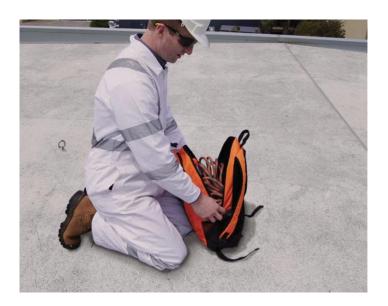


User must remain in restraint at all times. Limit access beyond the fall edge by correctly adjusting the rope line adjuster and do not allow slack in rope line.



### Step 7

Harness equipment must be stored in protective carry bag provided and kept in a dry environment. Proceed safely back to the roof access point.



### Step 6

Use diversion anchors to access corners or possible pendulum areas. Attach rope line to diversion anchorage using carabiner as shown in inset image.



Any damage to harness gear or anchorage system during use MUST be reported to the workplace manager and removed or tagged 'Out of Service' until replaced/recertified by competent height safety inspector



 $\bigwedge$  Follow the company reporting procedure on completion.

### ROPE LINE Layout

### Correct rope line length

No slack in rope line, user has no risk of a pendulum fall. Rope line length must limit access beyond the fall edge.





### Incorrect rope line length

Slack rope line between user and anchor will result in a fall and could cause severe injury or death.





### SYSTEM MAINTENANCE

### Must be read prior to checklist

- The Kattsafe fall arrest anchor system needs to be checked and recertified by a competent height safety inspector every 12 months for non corrosive environments or 6 monthly for corrosive or harsh environments. (To be determined by competent person depending on severity of surrounding conditions.)
- 2. Never clean using acids or other chemicals that could damage the system components.
- Removable eyebolts must be checked to ensure thread integrity as well as correct penetration depth into ferrule (20mm or a minimum of 10 full turns.)
- 4. The energy absorbing eyelet on some anchors is subject to wear depending on frequency of usage. Any signs of excessive wear will require the anchor to be replaced.

- 5. The identification label must be completed confirming certification, maintenance and recertification of the system.
- Harness gear and equipment must be maintained and stored in a dry, protected area, away from acids and ultra violet rays which cause material fibres to break down and reduce their safety and life expectancy.
- 7. Any deterioration or damage to the system or equipment must be reported to person in control of the workplace and relevant corrective action undertaken.
- 8. Maintenance inspections must be clearly documented. Any non-conformance must be clearly identified and tagged 'Do Not Use' until corrective action by a competent person has been completed.

### MAINTENANCE CHECKLIST

The checklist below outlines key checking criteria required to ensure the safe use of this system. Any item of concern not shown on the checklist must be noted on the maintenance report and brought to the attention of the workplace manager.

Items ticked PASS - YES means they conform with the required checking criteria and are suitable for normal use until the next recertification date. System data plates must be updated showing current check date and next check date.

Item ticked PASS - NO means they do not conform to the required checking criteria. These items must be clearly tagged 'Do Not Use' and the required corrective actions put in place. The maintenance report must clearly document all non-conforming criteria



This system must be maintained by a competent height safety inspector trained in the safe use and maintenance of this system.

Component	Inspection criteria	Pass Y/N	Corrective action	Completion date
Structure	Concrete structure to be visually sound.			
	No evidence of cracks or flaky surface.			
Anchor	No evidence of anchor deterioration or damage.			
	Removable anchors must be threaded into sleeve by a minimum 20mm or 10 full turns.			
Positioning Fall/load	Anchor to be correctly tensioned and facing the load / fall direction.			
Load testing  A 6 - 7.5kN 3 Mins	Glued in anchors secure under live load test to 50% of ultimate design load for 3 minutes.  - Rope access 12kN - 6kN load test  - Fall arrest 15kN - 7.5kN load test			
Data label	Anchor data label attached at each anchor.			
	All relevant data filled out including next maintenance due date.			

## TECHNICAL INFORMATION

### Fall clearance

There must be sufficient clearance below the user to arrest a fall before the user strikes the ground or another lower level hazard. The clearance required is dependent on the following factors:

- Elevation of anchorage
- Anchorage deflection
- Lanyard length
- Lanyard elongation on deceleration pull out (personal energy absorber)
- Operator height
- Fall distance residual clearance

See AS/NZS 1891.4:2009 Section 7 for a detailed explanation.

### System requirements

The worker must wear a full body harness when connected to any fall arrest system including a personal energy absorber compliant with AS/NZS 1891.2:2001 and AS/NZS 1891.4:2009 limiting the force on the anchor and operator to a maximum of 6kN.

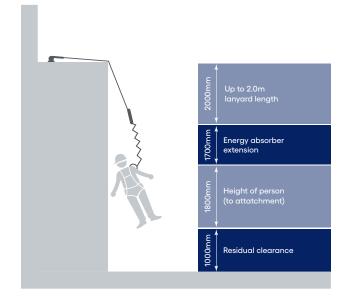
Harness connectors must support at least 15kN. Non-compatible connectors may unintentionally disengage (roll-out). Carabiners supplied with proprietary systems must not be removed or substituted with any other component.

### Inspection and Maintenance

Inspection and recertification of fall arrest systems and equipment is required at least every 12 months by competent person in accordance with manufacturer's specifications and requirements of Australian Standard AS/NZS1891.4:2009 Section (9).

### Important note

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



## TECHNICAL SPECIFICATION

#### Concrete mount anchors

The Kattsafe concrete mount anchor range for safe work at height for concrete mount applications. The system is to be designed, installed and used by Kattsafe approved partners only. System design, supply, layout, installation and certification by a Kattsafe approved installer, as per the manufacturer's installation instructions and current standards.

#### **Materials**

- Stainless steel
- AP126: Zinc and stainless steel

### Fixings (refer to installation manual)

See installation procedure.

#### Working load limit

Rope access rating: 12kNFall arrest rating: 15kN

### Compliance

Kattsafe concrete mount anchors are designed and manufactured in accordance with requirements of Australian and New Zealand Standards AS/NZS 1891.4:2009, AS/NZS ISO 22846 and AS/NZS 5532:2013 and relevant statutory WHS Codes of Practice/Guidelines.

### **Testing**

Testing and performance based on requirements of Australian and New Zealand Standards AS/NZS 5532:2013.

- Dynamic load tested 15kN
- Static load tested 15kN

### **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 height safety system inspector in accordance with manufacturer's specifications and requirements of Australian and New Zealand Standards AS/NZS 1891.4:2009 Section (9), and AS/NZS ISO 22846.

### 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.



### **Installation manual**Concrete mount anchors



**Operations manual** Fall arrest anchors



QMS Certification ISO 9001:2015

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



Height access and fall protection

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