

OPERATION MANUAL

STATIC LINES



Kattsafe static line is a proprietary fall arrest system suitable for multiple users, providing a high level of safety for workmen and maintenance personnel requiring safe access to plant and equipment.



Product brochure Static lines



Installation manual Static lines



Operation manual Static lines

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.

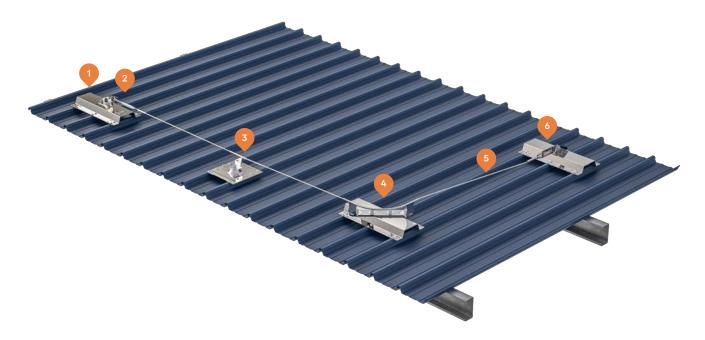
For more information please contact Kattsafe. kattsafe.com.au

- 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



STATIC LINES

Kattsafe static lines for personnel working at height using a fall arrest harness and lanyard system.





End stanchio

This provides a secure termination anchorage for the cable.



Cable tensioner with indicator

Ensures line tension can be adjusted after installation and during maintenance.



Intermediate

To support the cable and reduce forces on the end stanchions.



Corner

Supports a change in the direction of the cable.



Traveller

Providing smooth operation along the cable for the operator, and the fail safe cable locking feature on this unit ensures total user confidence when attached to the system.



Energy absorber

Designed to deploy under excessive load, limiting forces on the system and operator.

OPERATION REQUIREMENTS

Must be read prior to use

- Prior to use, ensure all operating procedures have been read and properly understood.
- 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.
- 5. A rescue plan must be formulated and ready for implementation prior to using any fall arrest system.
- Authorisation to access any risk area must be obtained from the person in control of the workplace.
- Only approved full body harness, gear and equipment with an energy absorber certified to Australian and New Zealand 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.
- 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.
- 12. All applicable Australian Standards, WHS Acts & Regulations, and Codes of Practice & Guidelines must be read and obeyed when using this safety system.
- 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

- 1. 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.
- 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 and New Zealand Standard AS/NZS 1891.1.
- Kattsafe static line not to be used on slopes/roof pitches exceeding 30° or used for twin rope access (abseil) applications.
- Do not exceed maximum number of users/persons per span. See specific system data plate for user configuration.
- Only one person to be connected to the traveller at any one time (max 120kg user weight)
- 7. The traveller is only to be used with the proprietary carabiner provided.
- 8. The traveller is not to be used in the inverted position as a severe load could cause failure of the traveller causing injury or death.
- 9. The traveller is not certified to be used on any other static line system other than the Kattsafe cable system.
- Do not exceed maximum number of users/persons per system. See specific system data plate for user configuration.
- 11. The Kattsafe static line is not to be used for rope access (abseil) anchorage.
- 12. Do not tamper with system components.
- This system is not to be used for tethering or lifting machinery or equipment.
- 14. 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.

A

Harness gear must be certified to Australian Standards AS/ NZ 1981.1:2009. Static line system must be used with a tear-web energy absorbing lanyard connected to fall arrest point of harness. Ensure harness gear serviceability dates are current.



Step 3Approach system from a 'safe zone' i.e. no risk of fall or injury.



Step 2

Only the Kattsafe traveller must be used with the static line system.



Step 4Correct attachment of the traveller is essential for safe use.



Step 5Remove carabiner from the traveller.

Step 7Place traveller over cable.



Slide traveller latch to open position.

Step 8
Flip traveller over and slide latch to closed position.





Insert carabiner into traveller.



Ensure traveller is securely attached to cable and carabiner screw gate is closed and locked (if it is a screw type gate, tighten gate then loosen by half a turn).



Do not attempt to use the traveller upside down. Should access to the opposite side of the line be required, the traveller must be removed and reattached correctly.



Step 11 Attach lanyard snap hook to traveller carabiner.



Rope line must be attached to harness fall arrest connection via tear-web energy absorbing lanyard.

Step 10

Traveller is now ready to use.



Step 12

Adjust rope line to a safe and comfortable distance to traverse roof.



Maintain close proximity to static line for optimum safety and traveller operation.





Once in line with area to be accessed, adjust rope line length evenly toward the roof edge.

Ensure there is no slack in the rope line.



Step 15

Use diversion anchors to access corners or possible pendulum areas. Attach rope line to diversion anchorage using the carabiner.



Step 14

Ensure there is no possibility of pendulum when at fall edge.



User must remain in restraint at all times limiting access beyond the User must remain in restauration fall edge ie. no slack in rope line.



Step 16

When disconnecting from the system, return to the static line keeping the rope line tensioned.



Ensure there is no risk of a fall at detachment location.



Disconnect traveller.

Step 18

Proceed safely back to the roof access point.



Follow your organisation's procedures on reporting completion of work.





Step 19

Harness equipment must be stored in carry bag provided and kept in a dry environment.



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 recertified by competent height safety inspector.



ROPE LINE LAYOUT

Correct rope line length

Rope line length must be positioned to limit access beyond the fall edge.





Incorrect rope line length

Slack rope line between the user and the anchor will result in a free fall causing severe injury or death.





SYSTEM MAINTENANCE

Must be read prior to checklist

- This 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 specialist depending on severity of surrounding conditions.)
- If the traveller does not slide smoothly check the cable for dirt or grime. The recommended way to solve the problem is to spray the stainless steel cable and the traveller with a Teflon™ based dry lubricant once it has been cleaned.
- Never clean any of the components with acids or other chemicals that could damage the system components.
- 4. The traveller is subject to general wear depending on frequency of usage. Any signs of excessive wear will require the traveller to be replaced.
- The identification label must be completed confirming certification, maintenance and recertification of the system.
- 6. Points to check on the traveller include:
 - Inspect the traveller for any excessive wear or noticeable damage including cracks or burrs.
 - Inspect the sliding gate for proper operation. The gate must operate smoothly and not allow the traveller to be removed from the cable when the carabiner is in place.
 - Inspect the carabiner for proper closing action and any damage or wear.
 - Inspect the label. All identification labels/batch numbers must be visible.
 - Record the inspection results in the maintenance records.

- 7. Maintenance for the static line must be done by a qualified height safety system inspector.
- 8. 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.
- 9. Any deterioration or damage to the system or equipment must be reported to person in control of the workplace.
- 10. 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
End stanchion	Fixings to structure secure (min. 3 fixings to purlin, 9 fixings to roof deck).			
	All attachments/bolts secure.			
	No evidence of penetration seal deterioration.			
	No visible damage to unit/structure.			
Energy absorber	Secure attachment to end stanchion.			
	Lock in pin circlip secure.			
	No 'red' excessive force indicator visible.			
	No visible damage to unit/structure.			
Intermediate	Fixings to structure secure (min. 2 fixings to purlin, 8 fixings to roof deck).			
	All attachments secure.			
	No evidence of penetration seal deterioration.			
	No visible damage to unit/structure.			
Corner	Fixings to structure secure (min. 3 fixings to purlin, 9 fixings to roof deck).			
	All attachments secure.			
	No evidence of penetration seal deterioration.			
	No visible damage to unit/structure.			

Component	Inspection criteria	Pass Y/N	Corrective action	Completion date
Line tensioner and indicator	Secure attachment to end stanchion and secure swage connection.			
	Lock in pin circlip secure.			
	Tension indicator disc can be rotated manually.			
	Cable visible in inspection hole, no evidence of slipping.			
	All lock nuts and fixings secure.			
Anchorage cable	No cuts or frays to cable.			
	Cable correctly tensioned ie. not touching the roof deck.			
	Securely attached to end stanchions.			
	No visible damage.			
System traveller	Slide latch operates freely.			
	Gap between tongue & shuttle inner casing when closed and latched with carabiner, 5mm maximum.			
	Carabiner fits securely when slide latch closed.			
	Carabiner gate lock device operates securely.			
	No visible damage to unit.			
Data plate Kottsofe Management	Data plate attached and clearly visible.			
	All relevant data filled out, including last maintenance records date.			
Pull testing - concrete mount static line	End stanchion			
	Pull testing for the concrete mount end stanchion			
	anchor can either be done by testing each stud to 3.3kn or pull the whole anchor at the main attachment			
	point to 10kN. Undercut anchors need to be pull tested			
	at the time of installation only.			
	Intermediate			
	Pull testing for the concrete mount intermediate			
	anchor can be done by using an M12 eye nut as shown. Pull test to 6kN for 3 mins.			

10th year maintenance and inspection

Component	Inspection criteria	Pass Y/N	Corrective action	Completion date
All components	All regular inspections as per standard criteria above.			
End terminations	All end terminations must be pull tested to 10kN - Held for 3 minutes.			
All components	Some part may require replacement if there is visible wear.			

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 Australian and New Zealand Standards AS/NZS 1891.2:2001 and AS/NZS 1891.4:2009 limiting the force on the anchor and operator to a maximum of 6kN.

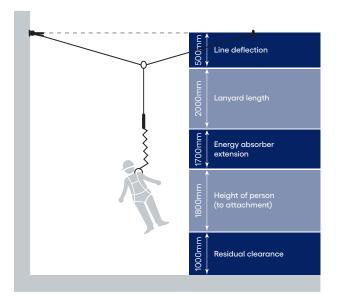
Harness connectors must support at least 15kN. Non-compatible connectors may unintentionally disengage (roll-out). Carabiners supplied with proprietary systems must not be removed or substituted with any other component.

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 and New Zealand 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

Static lines

Kattsafe static lines provide continuous attachment through intermediate connections points when using the a traveller, providing efficient fall protection for multiple users. 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 profiled plate assembly including: end stanchions, intermediates, corners, cable and connection devices.

Dimensions

- Attachment cable: 8mm (7 x 7 strand)
- Cable height off structure: 125 to 150mm

Fixings (refer to installation manual)

- Metal fixing: M14 stainless steel stud fixing
- Concrete fixing: M12 mechanical concrete anchor
- Metal roof deck fixing: 8mm construction grade bulb type rivets

Rating

- User weight limit: 120kg (user & equipment)
- Up to 4 users per line, determined by intermediate spacing and roof pitch
- Maximum roof pitch: 30° (across slope), 15° (with slope)
- Support structure integrity, suitability and fixing method to be assessed and determined by a competent person prior to installation
- Must only be used with the approved Kattsafe traveller device and harness system with energy absorber as per AS/NZS1891.1:2009 and AS/NZS1891.4:2009

Compliance

Kattsafe static lines are designed to conform with requirements of the Australian and New Zealand Standards AS/NZS 5532:2013 AS/NZS/ISO22846 and AS/NZS1891 and relevant codes of practices and guidelines.

Testing

Testing and performance based on requirements of Australian and New Zealand Standards AS/NZS 1891 and AS/NZS 5532.

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 to 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.

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 brochureStatic lines



Installation manual Static lines



Operation manual Static lines



QMS Certification ISO 9001:2015

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



Height access and fall protection

1029 Mountain Highway Boronia Victoria 3155 Australia

1300 301 755 sales@kattsafe.com.au kattsafe.com.au