ARRESTA®

VERTICAL STATIC LINE
FALL ARRESTOR

PROPRIETARY FALL ARREST SYSTEM FOR SAFE ACCESS & EGRESS ON FIXED LADDERS

⚠ MUST BE READ AND UNDERSTOOD PRIOR TO INSTALLATION

SAYFA® GROUP

1300 301 755
SAYFA.COM.AU

PRODUCT CODE
SL228

INSTALLATION MANUAL

ARRESTA®
VERTICAL FALL ARREST SYSTEM

Sayfa Group leads the industry in the design, installation and management of access & fall protection safety systems.

The In-Action model demonstrates access & fall protection requirements for a commercial building design.

Sayfa Group recommendations fulfill current workplace requirements for the safety of building maintenance subcontractors, employees and the general public.

1	KOMBI	Stairs & Service Platforms
2	RAPTOR	Davit Arms
3	SENTRY	Hatch Guardrail Kits
4	VISTA	Fold Down Ladders
5	3SIXTY	Fall Arrest Anchors
6	RAPTOR	Rigid Rail Systems

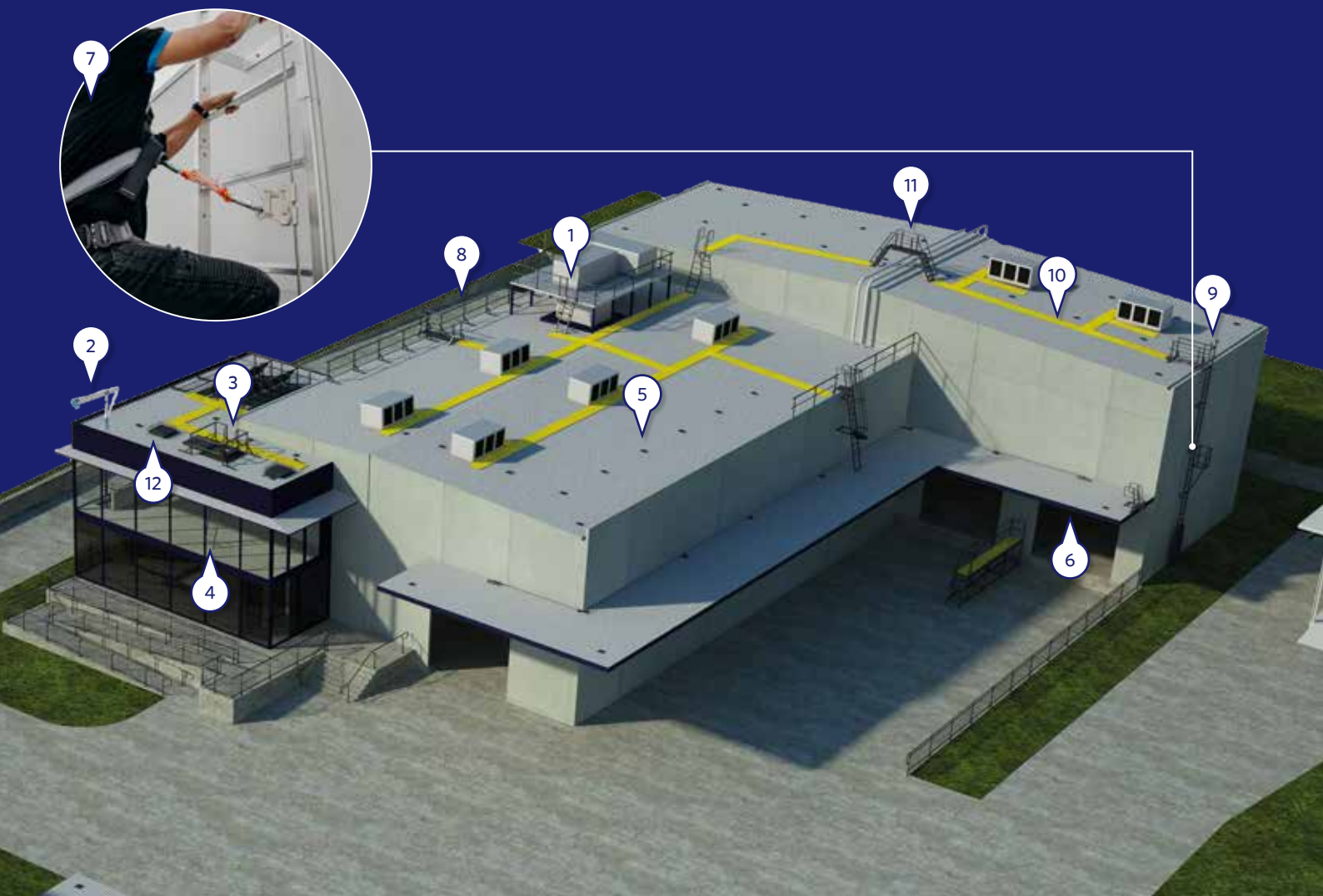
7	TRAVEL8	Static Line Systems
8	SENTRY	Roof Mount Guardrails
9	KATT	Rung Ladder Systems
10	PACE	Aluminium Walkways
11	ALTO	Step Ladders & Step Bridges
12	PROTEX	Skylight Protectors

For more information, please contact Sayfa Group directly.

STATIC LINE PAGE

SAYFA PRODUCTS

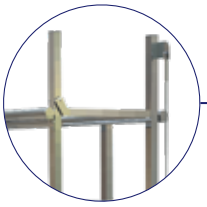
SAYFA INSTALL TRAINING



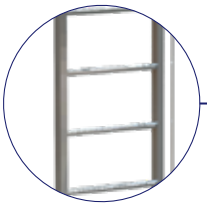
ARRESTA® FOR PERSONNEL ACCESSING HEIGHTS USING A HARNESS & FALL ARREST LADDER PROTECTION SYSTEM

FEATURES & BENEFITS

SWAGE END TERMINAL
Secure connection of cable to ladder attachment points

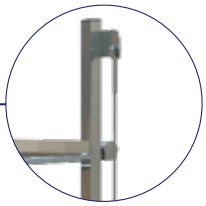


LADDER HEAD SAFETY BAR
Provides secure barrier at top of ladder once disconnected from the system



LADDER SECTION
High strength aluminium ladder body

CABLE TENSIONER WITH LOCKING SCREWS
Ensures controlled tensioning of cable

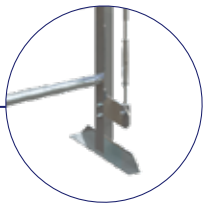


TOP ATTACHMENT BRACKET
Provides cable attachment point at top of ladder

⚠ **Cable end terminal must be crimp or roll swaged to arrest a fall load of 15kN.**

VERTICAL LINE FALL ARRESTOR WITH ENERGY ABSORBER
Provides secure attachment whilst ascending and descending ladder

STAINLESS STEEL CABLE
Cable to which Arresta shuttle attaches



LOWER ATTACHMENT BRACKET
Provides cable attachment point at base of ladder

UNIQUE PRODUCT FEATURE

VERTICAL LINE SHUTTLE

FOR CONSTANT FALL PROTECTION

A carefully engineered system operating under the force of gravity, activates once the shuttle is no longer restrained. Spring loaded cams instantly lock onto cable immediately arresting a slip or fall.

PATENTS & DESIGN REGISTRATIONS APPLY

INSTALLATION REQUIREMENTS

MUST BE READ PRIOR TO USE

1. This system must only be installed by competent persons trained in the selection, use and maintenance of fall arrest systems who hold a current Sayfa approved installer certificate.

2. Persons installing this system are required to have a comprehensive knowledge of the Australian Standards, codes of practice and industry guidelines that relate to the selection, use and maintenance of access and fall protection systems and equipment.

3. Integrity and suitability of the structure to which this system is attached must be approved by a structural engineer unless it is clear to a competent person as to the suitability of connection to structure.

4. Read installation and operating instructions carefully before commencing any work. Consent to deviate from the installation guide must be obtained in writing from the manufacturer.

5. Conduct an initial work/risk assessment, and take all reasonable precautions to eliminate or control potential hazards and risks during the installation of this product.

6. Complete all necessary OH&S documentation, including a Job Safety Analysis and Work Method Statement and obtain consent from responsible person in workplace prior to commencement of work.

7. Installers must be authorised and accredited by Sayfa Group and possess valid industry licenses, be appropriately trained, and comply with all relevant OH&S legislation prior to installation of this product.

8. Do not modify or remove any element of the support structure without prior authorisation by a qualified engineer.

9. Decorative coatings and coverings must be removed to ensure correct evaluation of structure prior to attachment of system

10. Any re-routing of electrical and/or other services must be carried out by qualified or authorised personnel.

11. Appropriate temporary access and safety equipment must be used during installation, such as platform ladders or scaffolding and fall protection anchorage points.

12. In case of emergency access and fall protection systems must be installed by a minimum of two persons.

13. Do not tamper with, modify or remove any part this system unless authorised by the manufacturer.

14. Appropriate labels or markings must be attached to each system and include the following:
    - System for personnel use only
    - Service entry date
    - Next examination/service due date
    - Harness gear requirements and system compatibility
    - Maximum designed load ratings
    - Installer/Certifier contact details

15. Documentation confirming correct use and maintenance of the system and equipment must be provided to the workplace manager on completion of installation. (See operation manual.)

LIMITATIONS

MUST BE READ PRIOR TO USE

1. Vertical fall arrest systems and vertical ladders require persons who are competent and trained in the safe use of the system. It is the responsibility person in control of the business or undertaking to ensure that they comply with State work, health and safety regulations and that they have assessed the hierarchy of risk control measures and alternative systems cannot be used.

2. The ARRESTA Shuttle is designed for single person use only rated to maximum user weight - 140kg. (Person and carry tools)

3. Fall arrest equipment is susceptible to deterioration when exposed to chemicals or hazardous environments and must be approved by the manufacturer for use in these applications.

4. This system, under normal use and environment, has a life expectancy of up to 10 years. A manufacturer's assessment and certification to confirm suitability for an additional 5 years' use is recommended. This will depend on location, usage and scheduled maintenance as per manufacturer and legislative requirements.

5. The structural requirements for the ladder to which the ARRESTA Shuttle is connected to must be able to withstand the loads applied in the event of a fall which is 12kN (see fixing requirements recommendation).

6. The ARRESTA Shuttle is designed for vertical climbing systems only to ensure correct operation of the fall arrest device. The fall arrest line system must not exceed 10° off vertical.

7. Only the approved ARRESTA SL228 vertical line fall arrestor shuttle with energy absorber shall be used with this system. An in-line energy absorber must be installed for any system that does not include an energy absorber built in with the fall device.

8. All ladders fitted with a fall arrest system require a security cover or lockable access door or device to prevent unauthorised use of the ladder.

9. The ARRESTA Shuttle is not designed for use on portable ladders or structures.

10. Do not tamper with or make alterations to system components without manufacturer's consent.

11. This system is not to be used for tethering or lifting machinery or equipment.

12. The ARRESTA Shuttle must be recertified by a competent height safety inspector as recommended:
    - Non-corrosive/mild environment – 12 monthly
    - Corrosive/ harsh environments - 6 monthly (more frequently inspection may be required)

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

DESIGN & INSTALLATION

MUST BE READ PRIOR TO USE

1. A vertical ladder with fall arrest system must only be installed if an angled cage ladder is not practicable. A vertical ladder with fall arrest system will require user competency training and ongoing recertification to ensure no deterioration of the system.

2. The ladder to which the ARRESTA Shuttle is attached as well as the structure to which the ladder is attached must be structurally adequate to withstand fall arrest loads of 12kN. An engineer's certification must be obtained unless it is clear to a competent person that the structure will facilitate the required loads.

3. The cable fall arrest system needs to terminate a minimum of 1000mm above the ladder head exit landing and approximately 200 - 300mm from the base landing to allow safe connection / disconnection from the system.

4. The ladder head must be fitted with a safety gate to ensure the operator is guarded with a barrier whilst connecting / disconnecting from the system.

5. A guarded ladder head access kit must be installed to ensure safe entry / exit from the ladder head onto the roof.

6. As the steel wire rope is either 'crimp' or 'roll' swaged to the cable fall arrest end termination, it is essential to check into the cable viewing hole located at the top of the terminal shaft to make sure that there is no wire 'slippage' by ensuring that the cable is visible.

7. The swaged end termination of the cable **MUST** be attached to the ladder head anchor point and the cable tensioner termination **MUST** be attached to the ladder base anchor point. **NOTE: The cable tensioner termination is mechanically connected to the cable by means of 2 x grub screws. This termination is not designed to handle excessive loads and must not be positioned at the ladder head fall arrest anchor point. Incorrect attachment of the tensioner termination to the top of the ladder system will cause the system to fail and lead to serious injury or death.**

8. Single vertical ladders above 8 metres will require an intermediate cable guide to limit cable sway which can cause fatigue on the termination points. Sayfa recommends 3 - 6 month recertification of ARRESTA systems in areas of high wind conditions.

9. Certain environments produce acidic atmospheric conditions which are detrimental to steel, alloy and concrete surfaces. Any acidic environments must be assessed and structural components certified by a competent person prior to installation of the system.

TOOLS & EQUIPMENT

CORDLESS DRILL

8MM 3/8TH DRILL BIT

13MM SOCKET OR SPANNER

WIRE CABLE CUTTER

ROOF MARKING PEN

TAPE MEASURE

⚠ **SAYFA recommends that persons using fall arrest systems do not work alone in case of an emergency and help is required.**

INSTALLATION PROCEDURE

STEP 1 - PRE INSTALLATION CHECK

Prior to installation the condition of the ladder and structure must be checked for suitability.

As this system is required to arrest a fall, an engineer's certification is required unless it is clear to a competent person that the structure is suited to the required loads.

The checklist on page 11 will assist with critical assessment criteria.

⚠ **Do not proceed with installation of this system if any of the checking criteria does not meet the required standards. Seek advice from the manufacturer regarding other options.**

STEP 2

Secure cable to swage termination using a roll swage or crimp swage device.

Note: A roll swage requires a minimum of 60mm of clamping length and a crimp swage requires a minimum of 5 crimps.

STEP 3

Connect swaged termination with cable to the ladder head fall arrest bracket and secure with insert pin.

STEP 4

Once pin is in home position lock in place with the spring clip provided.

INSTALLATION PROCEDURE

STEP 5

Attach the ladder base connection cable tensioner to the ladder base by inserting the pin through the bracket and lock in place with spring clip.

Note: Position ladder base connection bracket approximately 200 - 300mm from base of ladder.

STEP 6

Position tensioner to allow adequate length of thread for tensioning.

STEP 7

Align cable alongside the tensioner and mark the cable where it needs to be cut. Ensure a minimum cable length of 20mm below lower grub screw is allowed.

STEP 8

Cut the cable using cable cutter to suit 8mm cable.

INSTALLATION PROCEDURE

STEP 9

Insert the cable into the tensioner sleeve. Ensure cable is at least 20mm past lower grub screw.

STEP 10

Fasten both grub screws securely using the allen key provided.

STEP 11

Tension the cable using the bottle screw until cable is steady – DO NOT over tension as this will cause unnecessary tension in the system

STEP 12

Once system is tensioned, fasten the lock nuts to top & base of the bottle screw tensioner to prevent it from coming loose.

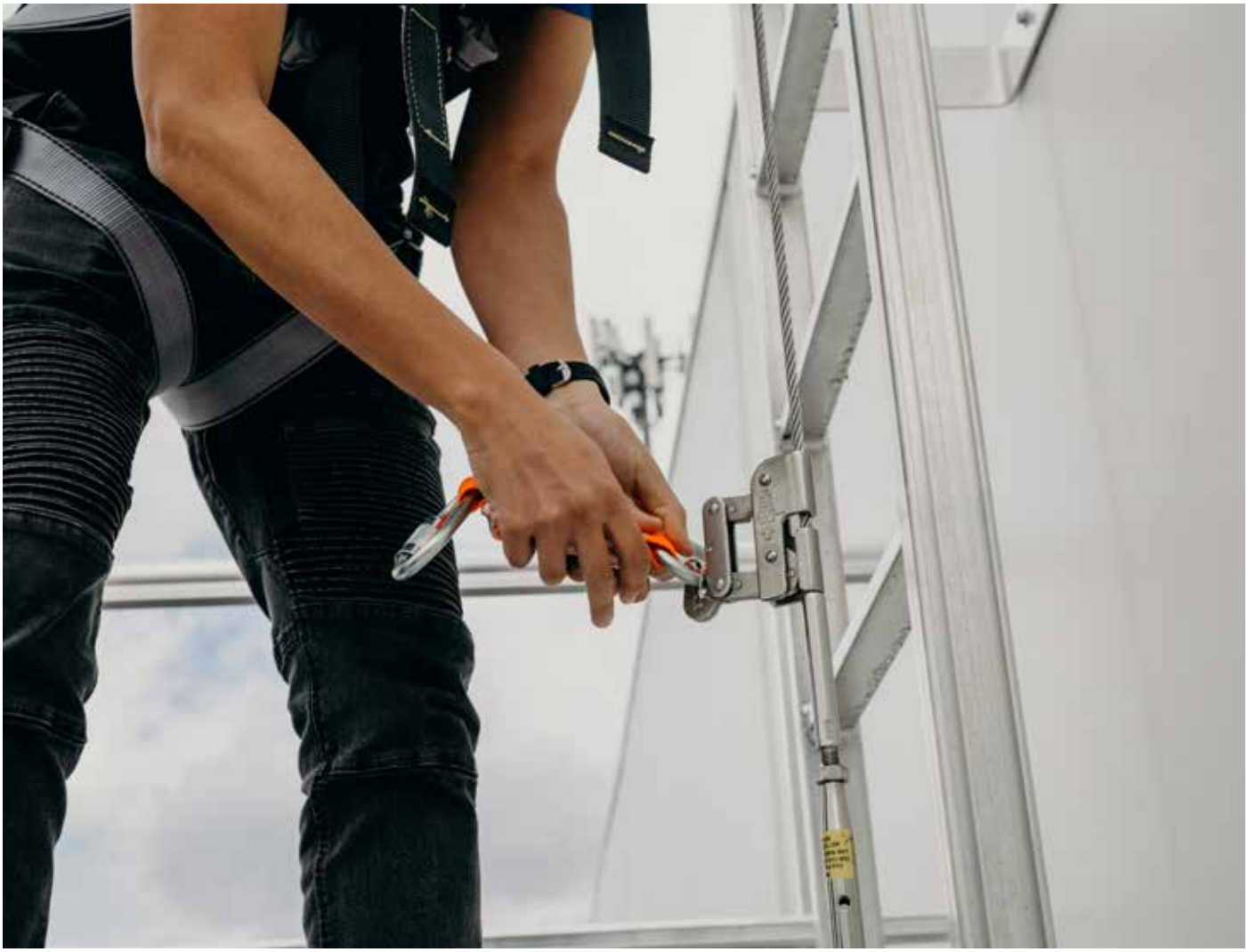
RETROFIT VERTICAL LINE POST RL437 INSTALLATION PROCEDURE

GENERAL INSTALLATION REQUIREMENTS

1. This system is only suitable for the following types of fixed ladder systems as follows:

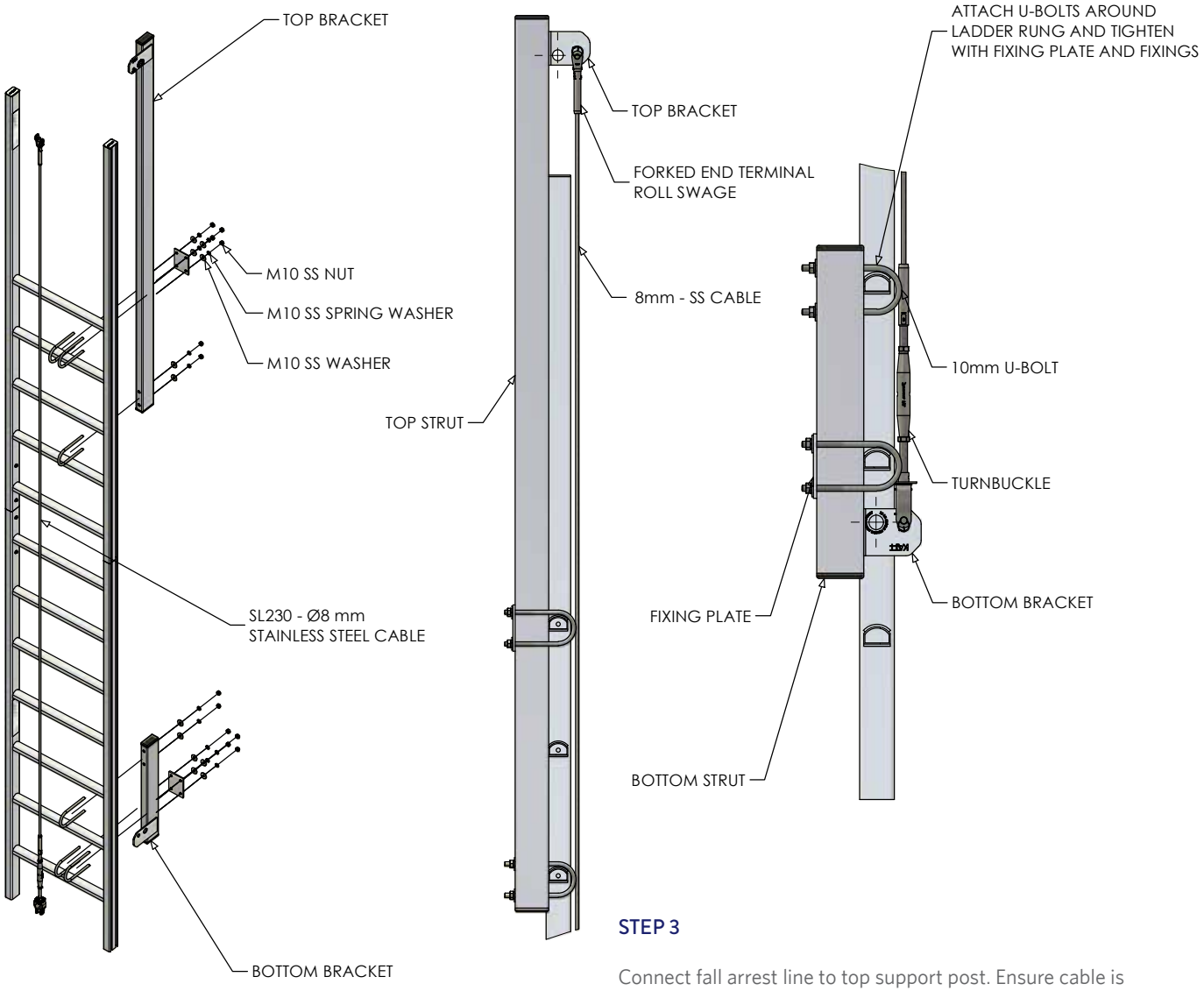
- KATT aluminum ladders installed as per manufacturer requirements
- Steel ladders installed and approved for fall arrest attachment

2. Ladder requires a minimum rung of 20m.
3. The ladder is required too support a 15kN downward load and 4kN horizontal (outward) load for fall arrest situations.
4. Suspended ladders or ladder without a structural solid base support or ladders attached to block work or brickwork are not suitable for fall arrest loads unless certified by a competent person.
5. The ARRESTA Shuttle with energy absorber or approved equivalent must be used with this fall arrest system.
6. This system is designed to incorporate the 8mm cable system. The cable must be suitably attached to the fall arrest post to ensure required fall arrest load of 15kN in a fall situation.
7. The top fall arrest post is required to be attached to 2 rungs with a minimum distance between U-Bolts of 500mm. If 500mm is not achievable spanning over 3 rungs, spanning over 4 rungs will be required.
8. The required torque settings for the U-Bolt connection device is 20Nm.
9. Ladder must be fitted with suitable signage confirming limitations of use as well as specific usage directions and precautions.
10. All fall hazards must be suitably controlled during installation of the system.



RETROFIT VERTICAL LINE POST RL437 INSTALLATION PROCEDURE

The KATT Retrofit vertical line post is designed to be attached to an existing fixed ladder alone with the ARRESTA Vertical Static Line System, providing fall protection when climbing the ladder. Ladder suitability and correct installation of the ARRESTA Vertical Static Line System is paramount to ensure the safety of the user.



STEP 1

Assess suitability of ladder to perform with arresta fall arrest loadings. Attain authorisation from a competent person if unsure of suitability.

STEP 2

Install top fall arrest support post to ladder head using 2 x M10 U-Bolts on the top rung and 1 x M10 U-Bolt on the lower rung.

⚠ **Ensure support post is connected to 2 rungs with a 500mm minimum distance between U-Bolts.**

STEP 3

Connect fall arrest line to top support post. Ensure cable is appropriately attached to withstand a 15kN downward load.

⚠**Do not cut cable to length until lower support post has been positioned.**

STEP 4

Install base fall arrest post to ladder rung using 1 x M10 U-Bolt on the upper rung and 2 x M10 U-Bolts on the lower rung.

STEP 5

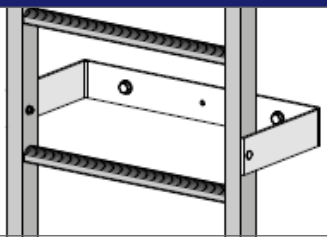
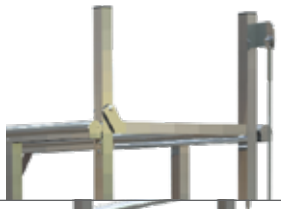
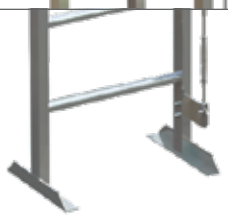
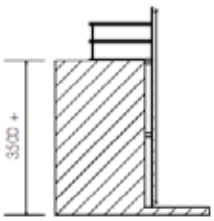
Cut fall arrest post to length and attach to support post appropriately to ensure cable remains firm in a fall situation.

INSTALLATION CHECKLIST

ARRESTA®

PROJECT:	
ADDRESS:	
REF NO.:	

INSTALLED BY:	
PROJECT MANAGER:	
INSTALL DATE:	

	INSPECTION CRITERIA	COMPONENT	TECHNICAL DIAGRAM	CHECKED
1.	Ladder structural suitability	- Ladder connection to structure suitable for fall arrest use - Ladder head fall arrest system bracket suitable for required loads - Ladder in good condition and fit for purpose		
2.	Ladder fall arrest line attachment to top fixing bracket	- Attached to ladder head fixing bracket - Must be minimum 60mm of roll swage OR - Minimum of qty x 5 crimps measuring 10.8mm - 11.2mm across crimp flats - Locking pin spring clip attached		
3.	Ladder base cable attachment bracket	- Secured to ladder using 2 x 8mm stainless steel bolt - Positioned approximately 200 - 300mm from base of ladder		
4.	Ladder fall arrest line attachment to base of ladder	- Qty 2 x cable locking grub screws firm - Cable firm, not overtensioned - Cable tensioner positioned at base of ladder - Tensioner lock nuts secure		
5.	Stainless steel cable	- Free from dust/grime - Cable guides fitted for lines exceeding 8.0M		
6.	Labels and signage	- SD974 ARRESTA user information signboard installed - System information sign attached with required information - Operation manual and user training supplied to the customer		

SIGNED _____ NAME _____ DATE / /

MAINTENANCE

1. 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 competent person depending on severity of surrounding conditions.)

2. Never clean using acids or other chemicals that could damage the system components.

3. The cam pivot points on the ARRESTA Shuttle should be lubricated using a dry graphite lubricant, NOT oil which will attract dirt.

4. The identification/certification label must be completed confirming maintenance and recertification of the system.

5. 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.

6. Any deterioration or damage to the system or equipment must be reported to the person in control of the workplace and relevant corrective action undertaken.

7. 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.

WARRANTY

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@sayfa.com.au or contact technical helpline, 1300 301 755.

TERMS & 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 Sayfa system installer will void all warranty rights.
- Systems that have been installed using non proprietary equipment will void all warranties.
- System roof/cladding 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.

TECHNICAL SPECIFICATION

SYSTEM
ARRESTA VERTICAL LINE FALL ARREST SYSTEM

CODE
SL228

FEATURES
The ARRESTA Vertical Line Fall Arrest System is ideally suited to maintenance personnel requiring safe access and egress to elevated areas by means of a fixed ladder to which the ARRESTA is attached. The operator is connected to the Vertical Line Fall Arrest System via the ARRESTA Shuttle using a full body harness and lanyard assembly.

The ARRESTA Vertical Line Fall Arrest System can also be easily retrofitted to existing ladders. System design, supply, layout, installation and certification by a SAYFA approved installer, as per the manufacturer's installation instructions and standards.

- The ARRESTA System can be installed on existing ladders
- Provides high level of safety and user assurance at any point of the ladder
- High strength stainless steel components
- The ARRESTA Shuttle unit is removable and can be used in other locations

TECHNICAL DATA

MATERIALS
- ARRESTA Shuttle – stainless steel (316)
- Energy absorber lanyard – polyester webbing
- Vertical line cable – stainless steel (316)
- Cable end terminations – stainless steel (316)

DIMENSIONS
- ARRESTA Shuttle – 100mm (L) 44mm (W)
- Energy absorber – 130mm (static length)
- Vertical line cable – 8mm (7 x 7 strand)

WEIGHT
- 0.90kg (ARRESTA Shuttle including energy absorber)

WORKING LOAD LIMIT
- 140kg max, 6kN rated - Single person use (in conjunction with energy absorber lanyard device).
- ARRESTA Vertical Line Fall Arrest System must be used in conjunction with an approved harness system incorporating an energy absorber where required.
- This system must only be used by competent personnel trained in the safe use and maintenance of fall arrest systems.

COMPLIANCE
ARRESTA Vertical Line Fall Arrest System is designed to conform with requirements of Australian & New Zealand Standards AS/NZS 1891.4.2009 and codes of practice and guidelines.

TESTING
Testing and performance based on requirements of Australian Standard AS/NZS 1891.4:2009.
- Dynamic load tested – 12kN
- Resultant load on structure – 5.85kN

PRODUCT WARRANTY
3 years from date of purchase subject to correct installation, use and maintenance in accordance with manufacturer's specifications and recommendations.

INSPECTION AND MAINTENANCE
Inspection and certification every 12 months by competent height safety system inspector in accordance with manufacturer's specifications and requirements of Australian Standard AS/NZS 1891.4:2009. *(Refer operation manual.)*

IMPORTANT NOTE
Failure to supply and/or install proprietary product in accordance with manufacturer's instructions, industry codes and regulatory standards voids complete system certification and/or warranty. The design, installation and use require persons who are trained in the safe use of the system.

DISCLAIMER
https://sayfa.com.au/wp-content/uploads/2019/07/Product-Disclaimer_02.07.2019_SS.pdf

Designed and manufactured by SAYFA GROUP. For all technical assistance contact SAYFA GROUP. SAYFAGROUP-17.05.2023

1029 MOUNTAIN HWY
BORONIA VIC 3155
AUSTRALIA

T 1300 301 755
E SALES@SAYFA.COM.AU

FOR MORE INFORMATION
VISIT SAYFA.COM.AU

THE SAYFA GROUP

WE SAVE LIVES

This is our Mission, and it drives our Vision to BRING EVERY WORKER HOME SAFELY.

Sayfa Group leads the industry in the design, installation and management of access and fall protection systems. As an Australian owned company, we engineer and rigorously test our proprietary systems to exceed national and international standards. Simple installation and easy to use systems are our key drivers for ensuring maximum effectiveness and improved safety ensuring compliance with Occupational Health and Safety standards in the workplace.

OUR VALUES

Today in the face of a fast paced world, SAYFA works hard in the pursuit of excellence for the company, its people and its clients in view of a more prosperous future and leaving its inheritance for generations, for safer workspaces. This is represented in our core values.

Care - A personal eye for detail and genuine effort to support on-site installation complexities and to ensure nothing is overlooked.

Trust – No compromise. Trust in our people, our products, our installers.

Leadership – We are hungry, humble, and committed to take ownership of being leaders in our space.

Innovation – Modular, functional, intelligent. We create safety. We anticipate change.

Agility – Athletic, intense, ready to adapt, executed with precision.

COMMITMENT

We are passionate about our work with every product a testament to our commitment of world class safety, quality and performance. Our obligation is to live up to our own high standards as well as those of our customers and stakeholders ensuring total peace of mind.

ISO 9001:2015
QMS Certification