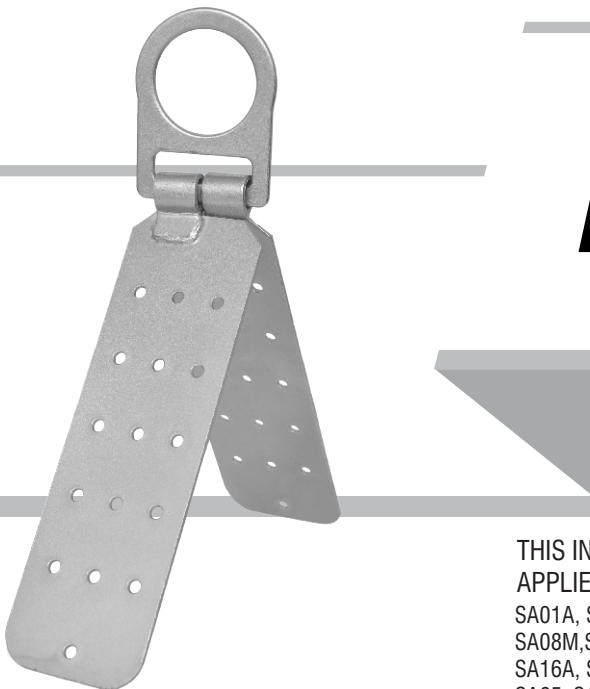




USER INSTRUCTION MANUAL



STEEL ANCHORS

THIS INSTRUCTION MANUAL
APPLIES TO THE FOLLOWING MODELS:

SA01A, SA03, SA03A, SA03C, SA04, SA08,
SA08M, SA10, SA11, SA11B, SA13, SA15A,
SA16A, SA48, SA48(SW), SA49, SA52,
SA65, SA66, SA68, SA68A(SS), SA71, SA72,
PN802A, SA28, SA42-12, SA101, SA102, SA
104, SA 104(6ft), SA111(12), SA111(18),
SA111A(12), SA111A(18), SA111B(12),
SA111B(18), SA118, SA118C, SA119,
SA119B AND SA126



ANSI Z359.18-2017

Please read and understand the manufacturer's instructions for each component or part of the complete system. Manufacturer's instructions must be followed for proper use, care, and maintenance of this product. These instructions must be retained and be kept available for the user's reference at all times. Alterations or misuse of this product, or failure to follow instructions, may result in serious injury or death.

Note: The user is advised to keep this user instructions document for the life of the product.

Manufacturer	: KARAM, PN INTERNATIONAL PVT. LTD., C-12, Industrial Area, Nadarganj, Lucknow-226008, INDIA.
Certification Body	: SATRA Technology Centre, Wyndham Way, Telford Way, Kettering, NN16 8SD, UK (Notified Body 0321)

This manual must be read and understood in its entirety and used as part of fall protection training program as required by OSHA or any state regularity agency. These instructions are intended to meet the manufacturer instructions as required by ANSI Z359.18-2017 and OSHA . The user must fully understand the proper equipment use and limitations.

TECHNICAL SPECIFICATIONS :

Ref. No.	Product Name	Minimum Breaking System	Material of Construction	Complying Norm
SA 01A	Hinged Steel Roof Anchor (Reusable)	5000 lbs / 23 kN	Galvanized Steel with Stamped D-Ring	ANSI Z359.18-2017 Type A
SA 03	Permanent use Staniless Steel Roof Anchor	5000 lbs / 23 kN	Stainless Steel with one side stamped D-ring (Ref. DR 005)	ANSI Z359.18-2017 Type A
SA 03A	Permanent use Staniless Steel Roof Anchor	5000 lbs / 23 kN	Stainless Steel with one side stamped D-ring (Ref. DR 005)	ANSI Z359.18-2017 Type A
SA 03C	Permanent use Staniless Steel Roof Anchor	5000 lbs / 23 kN	Stainless Steel with one side stamped D-ring (Ref. DR 005)	ANSI Z359.18-2017 Type A
SA 04	Permanent use Staniless Steel Roof Anchor	5000 lbs / 23 kN	Stainless Steel	ANSI Z359.18-2017 Type A
SA 08	Beam Anchor	5000 lbs / 23 kN	Aluminium Alloy & Brass	ANSI Z359.18-2017 Type A
SA 08M	Beam Anchor	5000 lbs / 23 kN	Aluminium Alloy & Brass	ANSI Z359.18-2017 Type A
SA 10	Steel Point Anchor	5000 lbs / 23 kN	Galvanized Steel	ANSI Z359.18-2017 Type A
SA 11	Parapet Anchor	5000 lbs / 23 kN	Galvanized Steel	ANSI Z359.18-2017 Type A
SA 11B	Parapet Anchor with Extended Movable Arm	5000 lbs / 23 kN	Galvanized Steel	ANSI Z359.18-2017 Type A
SA 13	Girder Anchor	5000 lbs / 23 kN	Stainless Steel with Galvanized Steel Anchorage Eye	ANSI Z359.18-2017 Type A
SA 15A	Beam Anchor Trolley	5000 lbs / 23 kN	Aluminium Alloy & Stainless Steel	ANSI Z359.18-2017 Type A
SA 16A	Concrete Anchor	5000 lbs / 23 kN	Cable: Galvanized Steel Clamping Jaws: Stainless Steel	ANSI Z359.18-2017 Type A
SA 48	Anchor for Container	5000 lbs / 23 kN	Galvanized Steel	ANSI Z359.18-2017 Type A
SA 48(SW)	Anchor for Container with swivel eye	5000 lbs / 23 kN	Galvanized Steel	ANSI Z359.18-2017 Type A
SA 49	Steel Anchor	5000 lbs / 23 kN	Galvanized Steel	ANSI Z359.18-2017 Type A
SA 52	Aluminium Anchor for Standing Seam Roof	5000 lbs / 23 kN	Aluminium Alloy & Stainless Steel	ANSI Z359.18-2017 Type A
SA 66	Hinged Anchor with Swivel D-Ring	5000 lbs / 23 kN	Galvanized Steel	ANSI Z359.18-2017 Type A
SA 68	D-Ring Two Hole Anchor	5000 lbs / 23 kN	Galvanized Steel	ANSI Z359.18-2017 Type A
SA 65	Roof Anchor	5000 lbs / 23 kN	High Strength Alloy Steel.	ANSI Z359.18-2017 Type A

SA 68A(SS)	D-Ring Two Hole Anchor	5000 lbs / 23 kN	Stainless Steel with Galvanized Dring	ANSI Z359.18-2017 Type A
SA 71	Stand Alone Post for Retractable Fall Arrester on Standing Seam Roof	5000 lbs / 23 kN	Galvanized Steel	ANSI Z359.18-2017 Type A
SA 72	Stand Alone Post for Retractable Fall Arrester on Trapezoidal Roof	5000 lbs / 23 kN	Galvanized steel	ANSI Z359.18-2017 Type A
PN 802A	Door Anchor	5000 lbs / 23 kN	Aluminum Alloy	ANSI Z359.18-2017 Type A
SA 28	Edge Fix Anchor	5000 lbs / 23 kN	Galvanized Steel	ANSI Z359.18-2017 Type A
SA 42-12	Flange Anchor	5000 lbs / 23 kN	Stainless Steel	ANSI Z359.18-2017 Type A
SA 101	Steel Anchor	5000 lbs / 23 kN	Galvanized Steel	ANSI Z359.18-2017 Type A
SA 102	Steel Anchor	5000 lbs / 23 kN	Galvanized Steel	ANSI Z359.18-2017 Type A
SA 104 SA 104(6ft)	Anchor	5000 lbs / 23 kN	Galvanized Steel	ANSI Z359.18-2017 Type A
SA 111(12) SA 111(18)	Anchor	5000 lbs / 23 kN	Galvanized Steel	ANSI Z359.18-2017 Type A
SA 111A(12) SA 111A(18)	Anchor with eye nut	5000 lbs / 23 kN	Galvanized Steel	ANSI Z359.18-2017 Type A
SA 111B(12) SA 111B(18)	Anchor with swivel eye	5000 lbs / 23 kN	Galvanized Steel	ANSI Z359.18-2017 Type A
SA 118	Swivel Anchor Post	5000 lbs / 23 kN	Galvanized Steel	ANSI Z359.18-2017 Type A
SA 118C	Swivel Anchor Post	5000 lbs / 23 kN	Galvanized Steel	ANSI Z359.18-2017 Type A
SA 119	Concrete Anchor Plate With D-ring	5000 lbs / 23 kN	Galvanized Steel	ANSI Z359.18-2017 Type A
SA 119B	Concrete Anchor Plate With D-ring and Base Plate	5000 lbs / 23 kN	Galvanized Steel	ANSI Z359.18-2017 Type A
SA 126	Anchor Plate	5000 lbs / 23 kN	Alloy Steel	ANSI Z359.18-2017 Type A

1. GENERAL REQUIREMENTS, WARNINGS AND LIMITATIONS:

- The Equipment is designed for use as a part of a personal fall protection system. Components must not be used for any other operation other than that which it has been designed and approved. Fall Arrest system are designed to comply with OSHA. Fall Restraint System must be designed by a Qualified Person, and must be installed and used under the supervision of a competent person.
- All authorized persons/users must refer the regulations governing occupational safety, as well as applicable ANSI or CSA standards. Please refer to product labeling for information on specific OSHA regulations, and ANSI and CSA standards met by product.
- Consult a doctor if there is any reason to doubt a user's ability to withstand and safely absorb fall arrest forces. Age, fitness, health conditions can seriously affect the worker in case a fall occurs. Pregnant Women and minors should not use this equipment.
- Proper precautions should always be taken to remove any obstructions, debris, material, or other recognized hazards from the work area that could cause injuries or interfere with the operation of the system. All equipment must be inspected before each use according to the manufacturer's instructions. All equipment should be inspected by a qualified person on a regular basis.
- All equipments must be regularly inspected by a competent person & must be checked before each use.
- To minimize the potential for accidental disengagement, a competent person must ensure system compatibility.
- Equipment must not be altered in any way. Repairs must be performed only by the Manufacturer, or persons entities authorized in writing by the manufacturer.
- Any product exhibiting deformities, unusual wear, or deterioration must be immediately discarded. Any equipment subject to a fall must be removed from service. The authorized person/user shall have a rescue plan and the means at hand to implement it when using this equipment.
- Never use fall protection equipment for purposes other than those for which it was designed. Fall protection equipment should never be used for towing or hoisting.
- All synthetic material must be protected from slag, hot sparks, open flames, or other heat sources. The use of heat resistant materials is recommended in these applications.
- Never use natural materials (manila, cotton, etc.) as part of a fall protection system.
- Do not expose this equipment to chemicals which may have a harmful effect on the materials used to construct it. Be especially aware of caustic environment, or those that contain high levels of organic acids or bases. If you are uncertain about the safe operation of this equipment in any environment, contact KARAM for further instructions.
- Do not use the equipment near sharp edges, abrasive surfaces and looping around small diameter structural members.
- Do not use the equipment around moving machinery or electrical hazards.
- KARAM Steel Anchors should be used only with the combinations of components, sub-systems or both which may affect or interfere with the safe function of one another. Be certain that connecting devices are compatible and that other elements of the PFAS are safe and compatible before use.
- Anchorage connector has been tested in compliance with the requirements of ANSI/ASSE Z359.7, and it must be understood that the ANSI compliance and testing covers only the hardware and does not extend to the anchorage and substrate to which the anchorage connector is attached.

- Anchorage connector shall only be connected to anchorages that:
 - Can withstand 5,000 pounds (22.2kN) without failure.
 - Are certified by a professional engineer as having the required strength for fall arrest.
 - Structures are duly checked and certified by a qualified person.
 - Anchorage connectors are certified to be used at a minimum temperature of -30°F(-34°C).
- Ensure to remove any surface contamination such as concrete, stucco, roofing material, etc., that could accelerate cutting or abrading of attached components.
- To be used by personnel weighing not more than 310lbs (including accessories).
- For installation of Anchor, Both Sheeting & purling should be present.
- Anchor must be installed away from edge at minimum 6.0 feet & maximum of 8.5 feet.
- Anchor should be installed on minimum 22 gauge metal sheeting over the 14 gauge Z purling minimum.

2. SYSTEM LIMITATIONS & REQUIREMENTS:

Consider the following limitations/requirements prior to installing or using this equipment:

- **Capacity:** KARAM Steel Anchors are designed for use by ONE person with a combined weight (clothing, tools, etc.) of not more than 310 lbs. (140 kg) Make sure all of the components in the system are rated to a capacity appropriate to the application. All KARAM Steel Anchors are rated 5000 lbs. (23 kN).
- **Free Fall:** Personal fall arrest systems used with this equipment must be rigged to limit the free fall to 6 feet (1.8 M) as per ANSI Z359.1. Restraint systems must be rigged so that no vertical free fall is possible. Work positioning systems must be rigged so that free fall is limited to 2 feet (.6 m) or less. Personnel riding systems must be rigged so that no vertical free fall is possible. Climbing systems must be rigged so that free fall is limited to 18 inch. (.46 cm) or less. Rescue systems must be rigged so that no vertical free fall is possible. See subsystem manufacturer's instructions for more information. Below figure illustrates fall clearance requirements. There must be sufficient clearance below the user to allow the system to arrest a fall before the user strikes the ground or other obstruction. Clearance required is dependent on the following factors:
 - Elevation of Anchorage
 - Connecting Subsystem Length
 - Deceleration Distance
 - Free Fall Distance
 - Worker Height

3. MOVEMENT OF HARNESS ATTACHMENT ELEMENT:

- **Swing Falls:** Swing falls occur when the anchorage point is not directly above the point when a fall occurs. The force of striking an object in a swing fall may cause serious injury or death. Minimize swing falls by working as close to the anchorage point as possible. Do not permit a swing fall if injury could occur. Swing falls will significantly increase the clearance required when a self-retracting lifeline or other variable length connecting subsystem is used.

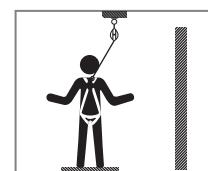
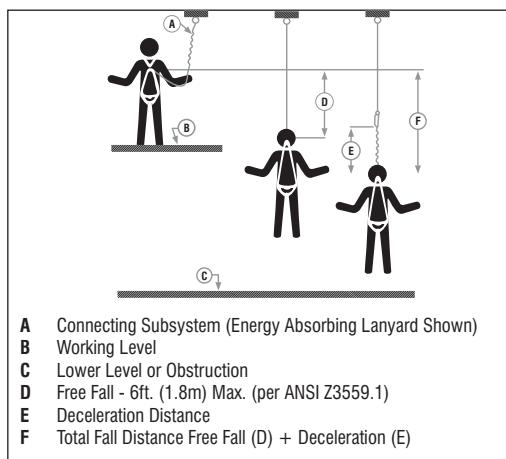
4. ENVIRONMENTAL HAZARDS:

Use of this equipment in areas with environmental hazards may require additional precautions to prevent injury to the user or damage to the equipment. Hazards may include, but are not limited to; heat, chemicals, corrosive environments, high voltage power lines, gases, moving machinery and sharp edges.

5. COMPATIBILITY OF COMPONENTS:

Unless otherwise noted, KARAM equipment is designed for use with KARAM approved components and subsystems only. Substitutions or replacements made with non-approved components or subsystems may jeopardize compatibility of equipment and may affect safety and reliability of the complete system.

- **Compatibility of Connectors:** Connectors are considered to be compatible with connecting elements when they have been designed to work together in such a way that their sizes and shapes do not cause their gate mechanisms to inadvertently open regardless of how they become oriented. If the connecting element that a snap hook or karabiner attaches to is undersized or irregular in shape, a situation could occur where the connecting element applies a force to the gate of the snap hook or Karabiner. This force may cause the gate (of either a self-locking or a non-locking snap hook) to open, allowing the snap hook or Karabiner to disengage from the connecting point. Connectors must be compatible in size, shape, and strength. Self-locking snap hooks and Karabiners must comply to ANSI Z359.1 and OSHA.



- **Making Connections:** Always use snap hooks and Karabiners which needs double manual action to open with this equipment. Only use connectors that are suitable to each application. Ensure all connections are compatible in size, shape and strength. Do not use equipment that is not compatible. Ensure all connectors are fully closed and locked the connection should not be made-
 - To a D-ring to which another connector is attached.
 - In a manner that would result in a load on the gate.
 - In a false engagement, where features that protrude from the snap hook or Karabiner catch on the anchor and without visual confirmation seems to be fully engaged to the anchor point.
 - To each other.
 - Directly to webbing or rope lanyard or tie-back (unless the manufacturer's instructions for both the lanyard and connector specifically allow such a connection).
 - To any object which is shaped or dimensioned such that the snap hook or Karabiner will not close and lock, or that roll-out could occur.

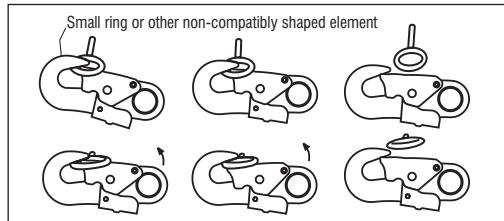
Note: Other than 3,600 lb. (16 kN) gated hooks, large throat opening snap hooks should not be connected to standard size D-rings or similar objects which will result in a load on the gate if the hook or D-ring twists or rotates. Large throat snap hooks are designed for use on fixed structural elements such as rebar or cross members that are not shaped in a way that can capture the gate of the hook.

6. RESTRICTIONS REGARDING MAKING CONNECTIONS:

- Do not make connections where the hook locking mechanism can come into contact with a structural member or other equipment and potentially release the hook.
- Do not connect a snap hook into a loop or thimble of a wire rope or attach in any way to a slack wire rope.
- The snap hook must be free to align with the applied load as intended (regardless of the size or shape of the mating connector)
- A karabiner may be used to connect to a single or pair of soft loops on a body support such as a body belt or full body harness, provided the karabiner can fully close and lock. This type of connection is not allowed for snap hooks.
- A karabiner may be connected to a loop or ring connector that is already occupied by an automatic closing connector.

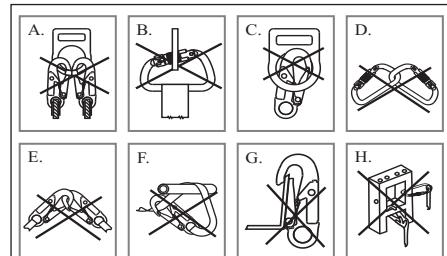
If the connecting element that a snap hook (shown) or Karabiner attaches to is undersized or irregular in shape, a situation could occur where the connecting element applies a force to the gate of the snap hook or Karabiner. This force may cause the gate (of either a self-locking or a non-locking snap hook) to open, allowing the snap hook or Karabiner to disengage from the connecting point.

Unintentional Disengagement (Roll-Out)



1. Force is applied to the snap hook.
2. The gate presses against the connecting Ring.
3. The gate opens allowing the snap hook to slip off.

Inappropriate Connections



7. CONNECTING SUB-SYSTEMS:

Personal fall arrest systems used with this equipment must meet applicable state, OSHA and ANSI requirements. A full body harness must be worn when this equipment is used as a component of a personal fall arrest system. As required by OSHA, the personal fall arrest system must be capable of arresting the user's fall with a maximum arresting force of 1,800 lbs. (8 kN), and limit the free fall to 6 ft. (1.8 m) or less. If the maximum free fall distance must be exceeded, the employer must document, based on test data, that the maximum arresting force will not be exceeded, and the personal fall arrest system will function properly. Free fall greater than 6 ft. (1.8 m), and up to a maximum of 12 ft. (3.7 m) is possible, KARAM recommends using a personal fall arrest system incorporating a KARAM Energy Absorbing Lanyard. KARAM has performed testing using the KARAM Energy Absorbing Lanyard in free falls up to 12 ft. (3.7 m) to ensure the maximum arresting force does not exceed 1,800 lbs. (8.0 kN), and the system functions properly.

8. RESCUE PLAN:

Rescue operation must be performed by a trained and competent personnel. The rescue operation must be performed under the supervision of the rescue expert team or personal. It is advised that while working on site work in pairs. Before going for the work the user must have the rescue plan ready according to the work.

If Equipment Is Subjected To A Fall:

Remove the equipment from service immediately if it has been subjected to the forces of a fall arrest. Contact your distributor or KARAM about policies regarding replacement of KARAM components involved in a fall.

9. SPECIFIC INSTRUCTIONS:

KARAM Anchors are designed to provide complete attachment system to the user in the event of a fall. These attachment systems must be connected to the proper body support and connecting facility. These Anchors are meant to hold the victim of fall till the rescue operation is performed, so this is important that the whole system must have all the essential components before going for use. The whole fall arrest system must be used by a trained/competent person. It is advisable to make a checklist of the essential components according to one's use before going for work.

10. USE OF FALL ARREST SYSTEM:

The fall arrest system MUST ONLY be connected to the back attaching element on the harness provided for the purpose ("D" ring or webbing attachment extension) or to the chest anchorage points ("webbing link" or "D" link). The chest anchorage points must imperatively be used together. The D-rings on the belt and the ventral anchorage point must only be used for the attachment of a work positioning or retaining system and never with a fall arrest system.

During use, check regularly the adjustment and/or attachment points.

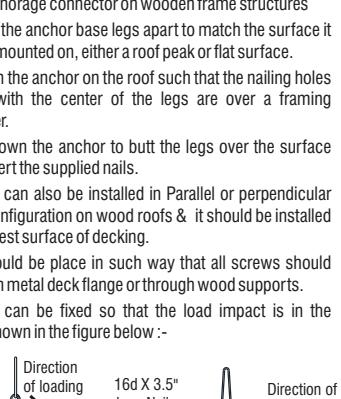
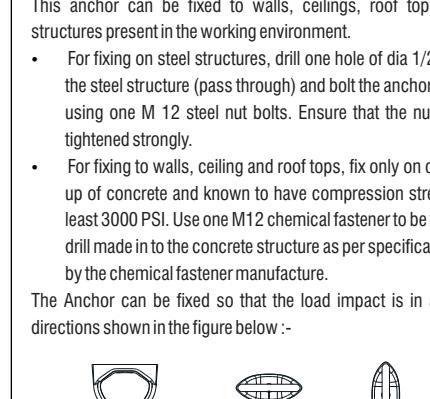
11. INSPECTION:

Before each use, proceed with thorough visual examination to ensure that the PPE is intact (the same applies for the equipment used with the harness (connectors, lanyard...)) and take all necessary steps concerning the implementation of rescue in total safety. In the event of your product being contaminated, consult the manufacturer or authorized agent. If you have any doubts regarding the safe state of the product or if the product has been used to arrest a fall, for your personal safety, it is essential to withdraw the PPE from service and send it back to the manufacturer or a qualified repair Center for checking or destruction.

Following the inspection, the center will provide written authorization or refusal for the use of the PPE. Never attempt to modify or repair PPE.

Before each use of this equipment inspect it according to the following guidelines: A formal inspection of fall protection products/components must be performed at least every six months by a competent person other than the user. The frequency of formal inspections should be based on conditions of use or exposure. Record the inspection results in the inspection and maintenance log at the end of this manual. The component should be checked for Cut, Frayed, Heavily Soiled, Welding Burns etc. Metal parts like D-rings should be duly checked for cracks, bents, deformities, corosions etc.

12. INSTRUCTIONS FOR INSTALLATION & USAGE OF FOLLOWING ANCHORS:

Instructions for Installation of Hinged Steel Roof Anchor (Reusable)(SA 01A) & Steel Roof Anchor (SA 49)	Instructions for Installation of Steel Point Anchor (SA 10)
<p>These Steel Anchors are designed to be used as a temporarily installed anchorage connector on wooden frame structures</p> <ul style="list-style-type: none"> • Spread the anchor base legs apart to match the surface it will be mounted on, either a roof peak or flat surface. • Position the anchor on the roof such that the nailing holes along with the center of the legs are over a framing member. • Push down the anchor to butt the legs over the surface and insert the supplied nails. • Anchor can also be installed in Parallel or perpendicular both configuration on wood roofs & it should be installed on highest surface of decking. • Anchor should be placed in such way that all screws should drive through metal deck flange or through wood supports. <p>The Anchor can be fixed so that the load impact is in the directions shown in the figure below :-</p>  <p>SA 01A</p> <p>SA 49</p>	<p>This Single Point Anchor is to be used for anchorage in a fall arrest system. This anchor can be fixed to walls, ceilings, roof tops or steel structures present in the working environment.</p> <ul style="list-style-type: none"> • For fixing on steel structures, drill one hole of dia 1/2 inches in the steel structure (pass through) and bolt the anchor on to it by using one M 12 steel nut bolts. Ensure that the nut & bolt is tightened strongly. • For fixing to walls, ceiling and roof tops, fix only on ones made up of concrete and known to have compression strength of at least 3000 PSI. Use one M12 chemical fastener to be fixed in the drill made in to the concrete structure as per specification stated by the chemical fastener manufacturer. <p>The Anchor can be fixed so that the load impact is in any of the directions shown in the figure below :-</p>  <p>Z-AXIS</p> <p>X-AXIS</p> <p>Y-AXIS</p>

Instructions for Installation of permanent use stainless steel roof anchor (SA 03/ SA 03A and SA 03C)

KARAM permanent use stainless steel roof anchor is specially designed to be used on wooden frame structures as a permanent anchor. This anchor is to be used as part of personal fall arrest system or a restraint system. Do not use this anchor as termination anchor for horizontal lifeline. The following guidelines may be followed for locating the roof anchors:

- The roof anchor should be installed as close to the roof peak as possible, at least 6 feet away from any exposed edge.
 - It should be attached only on supported wooden structure.
 - The minimum spacing between any two roof anchors should be 8 feet.

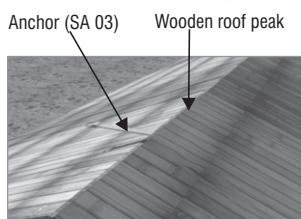


Fig.1- Wooden roof structure on to which anchor is to be installed

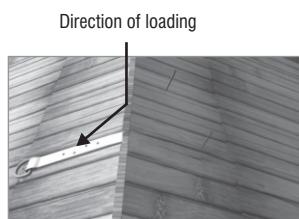


Fig. 2- Position the anchor on the roof and alternately insert the nails

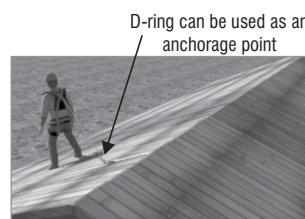


Fig. 3- Now the D-ring can be used as anchorage point

- Place the anchor plate to match the surface it will be mounted on, either a roof peak or flat surface. Ref fig. 1
 - Place the anchor in such a way that the product label face is in upward direction and the butyl flash tape sticks to the roof surface.

Note: The Butyl flash tape provides tolerable weather protection and water proofing, hence allowing the steel roof anchor to be installed directly on the roof surface without removing ridge cap / roof.

- Press down the anchor legs over the surface and alternately insert the provided nails. Ref. fig.2. Insert fasteners in all the pre-formed holes on the anchor plate as per the table given below.

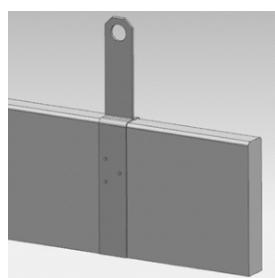
Table: Substrate And Fasteners Specifications for SA 03, SA 03A and SA 03C

	Underlying structure	Minimum Thickness of substrate	Nails/ screws specs	Total Nos.
1	Wood	3.5 inches	Screws: #12; 2 inch length/ Nails:16d ; 3.5"	10 nos. for SA03 & SA03A 06 nos. for SA03C
2	Metal	20 gauge	Metal deck screw	10 nos. for SA03 & SA03A 06 nos. for SA03C

Instructions for Installation of permanent use stainless steel roof anchor(SA 04)

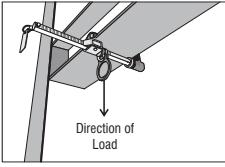
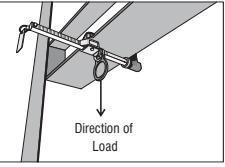
- STEP 1.** Place the anchor on the structure at which anchor point is to be created.
STEP 2. For installation, use compatible nails to fasten into the structure.
STEP 3. Use a compatible connector to connect with the anchor point.
STEP 4. Anchor is now ready to use.

DIRECTION OF LOADING



Possible Usage:

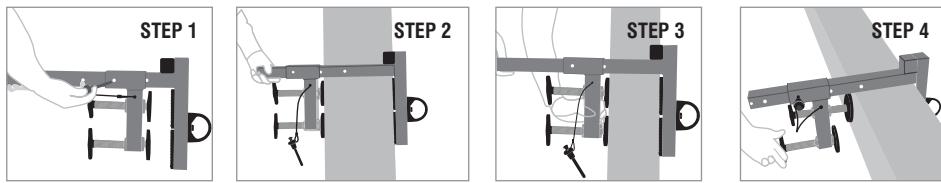
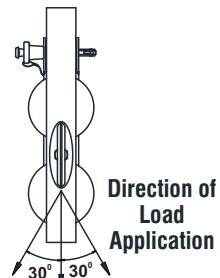
- Can be installed on roof truss, rafter or other structural member, which can withstand minimum loads of 12 kN.
- Can be installed either in upward or downward orientation.
- Use 12 nos., 16d X 3.5" nails or wooden screw to install the anchor on structure.

Instructions for Installation of Beam Anchor (SA 08)	Instructions for Installation of Beam Anchor (SA 08M)
<p>Beam anchor is intended to be installed on flanges of beam from 3.54" mm to 13.38" width.</p> <ul style="list-style-type: none"> Push the latch and adjust the movable jaw enough to allow the clamping jaws to fit over the flange of beam and release the latch to lock its position. Use the D-ring as connecting point. 	<p>Beam anchor is intended to be installed on flanges of beam from 2.95" to 5.90" width.</p> <ul style="list-style-type: none"> Push the latch and adjust the movable jaw enough to allow the clamping jaws to fit over the flange of beam and release the latch to lock its position. Use the D-ring as connecting point. 

Instructions for Installation of Parapet Anchor (SA 11 / SA 11B)

Parapet anchor is intended to be installed on a parapet wall up to 14.1 inches (360mm) thick.

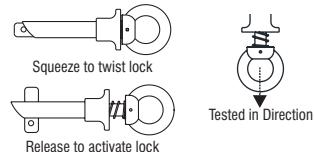
- STEP 1:** Unscrew the set screws so the points do not protrude into the anchor slot. Remove the detent pin and move the adjustable arm back far enough to allow the clamp to fit over the parapet wall.
- STEP 2:** Make sure the top surface within the anchor slot is fully seated on the parapet wall.
- STEP 3:** Slide the adjustable arm toward the parapet wall and reinserst the locking pin through the appropriate position setting holes.
- STEP 4:** Tighten each set screw until it makes contact with the parapet wall. Hands tighten the screws until snug. Excessive torque can damage the parapet wall or the parapet wall anchor.



Instructions for Installation of Girder Anchor (SA 13)

The Girder Steel Anchor may be attached to the structure by pulling on the spring loaded trigger component.

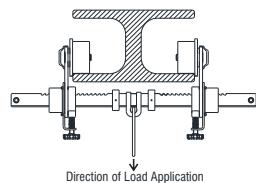
- When pulling on the spring loaded trigger, the blade rotates to a parallel position to the stem. The device is then inserted through a bolt hole in the range of 0.82" to 1.18".
- Ensure that the spring loaded blade returns to its original perpendicular position after the blade has cleared the hole in the steel work do not use the bolt hole anchor in a horizontal fashion. The device is to be used overhead and in a vertical position.



Instructions for Installation of Beam Anchor Trolley (SA 15A)

Beam Anchor Trolley is intended to be installed on flanges of beam from 3.15" to 9.84" width.

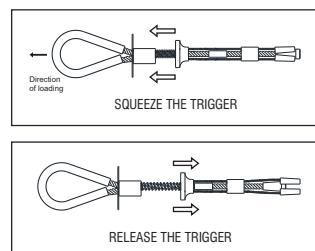
- Push the latch and adjust the movable jaw enough to allow the clamping jaws to fit over the flange of beam and release the latch to lock its position.
- Use the D-ring as connecting point.



Concrete Anchor (SA 16A)

The concrete Anchor (SA16A) may be attached to the structure by pulling on the spring loaded trigger component.

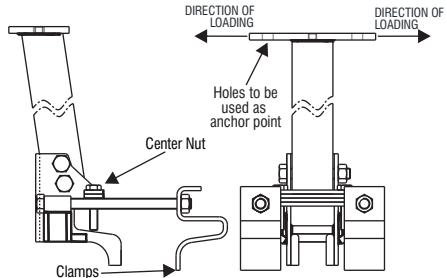
- When pulling on the spring loaded trigger, the outer jaws comes inside and allows the anchor front end to insert inside the hole. The device is then inserted through a hole of diameter .74 inches & depth of 4.35 inches concrete.
- Ensure that the spring loaded jaws return to its original position. Now the eye of the anchor can be used as anchorage point.



Instructions for Installation of Edge Fix Anchor (SA 28)

Installation steps :-

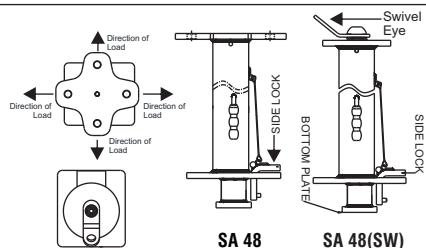
1. Place the anchor onto the I beam while the clamps are loosened.
2. Slide in the clamps so as to fit the size of I beam
3. Tighten the clamps to the fullest with help of Studs & Nut.
4. Tighten center bolt to ensure anchor is in desired upright position.
5. Now, holes on the plates can be used as anchor point for installation of lifeline or to be used as individual anchorage point.



Instructions for Installation of Anchor for Container (SA 48, SA 48(SW))

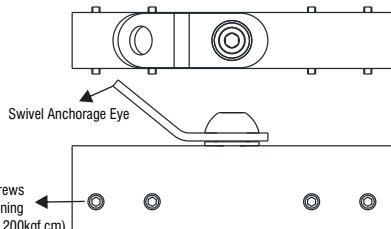
Installation of Container Anchor (SA 48)

1. Pull the side lock up with help of tag line for ease of installation.
2. Insert the bottom plate of the anchor in the pre-defined profile on container.
3. After inserting, rotate the anchor to lock the structure.
4. Release the side lock down, it will prevent the anchor from coming out of the structure accidentally.
5. Now holes on the anchor plate in SA 48 and swivel eye in SA 48 (SW) may be used as anchorage point.



Instructions for Installation of Aluminium Anchor For Standing Seam Roof (SA 52)

- Install the Anchor on the standing seam roof with help of supplied set screws.
- Connect the lifeline to the anchorage eye of the product.
- Now, product is ready for use.



**Compatible for Standing Seam Roof Steel Sheets
With Minimum Sheet Thickness of .05mm**

Instructions for Installation of steel anchor with swivel D-ring (SA 66)

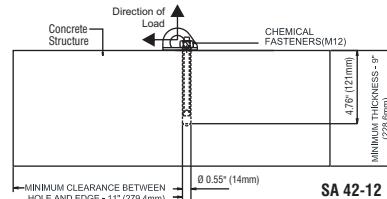
- The Hinged Steel Roof Anchor has two Steel Hinged Flaps which can be nailed to the roof wooden structure through various wide angles to provide a safe anchorage.
- Each flap consists 16 holes, use side 10 holes for 16D nails & 06 center holes for screws.
- Has Swivel D-ring for allowing movement over full work surface
- Follow below instructions to install the anchor :-
 - Spread the anchor base legs apart to match the surface it will be mounted on, either a roof peak or flat surface.
 - Position the anchor on the roof such that the nailing holes along with the center of the legs are over a framing member.
 - Push down the anchor to butt the legs over the surface and insert the supplied nails.



The Anchor can be fixed so that the load impact is in the directions shown in the adjacent figure.

Instructions for Installation of Flange Anchor (SA 42-12)

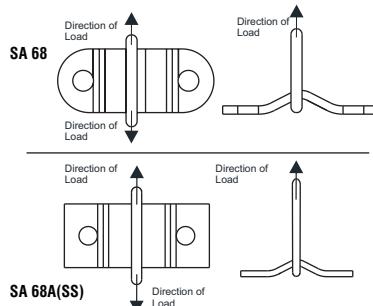
- Make a drill of $\varnothing 0.55"$, depth 4.76" on the concrete section. Make sure the thickness of the concrete structure is 9 inches minimum and the distance between the edge & the hole should be 11 inches minimum. Clean the hole immediately before setting the anchor, remove drilling dust and standing water from the base of the hole by blowing out well with at least 4 strokes of the blow out pump, or using compressed air or an industrial vacuum cleaner, the anchor hole must be free of dust, water, ice, oil, bitumen, chemicals or any other foreign matter or contaminates.
- Check that the hole is drilled to the correct depth before setting the anchor. Hole depth is correct when the chemical fastener contact the base of the hole and setting depth mark coincides with the concrete surface. Now push the chemical pouch into the drilled hole.
- Use the setting tool to drive the chemical fastener into the hole applying moderate pressure, stop the setting tool when the setting depth is reached and leave it for minimum 24 Hours to get the chemical cured.
- Insert the Flange Anchor followed by the washer and tighten the nut to the fullest.
- Now the eye of the flange anchor can / may be used as anchorage point.



Instructions for Installation of D-Ring Two Hole Anchor (SA 68) & SA 68A(SS)

INSTRUCTIONS FOR USAGE :

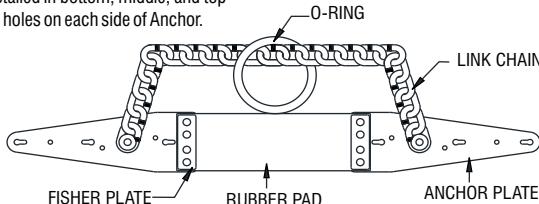
- Install D-ring 2 Anchor with bolts, or weld to substrate. For Metal installations, bolts must be fully embedded in substrate, and must be compressed flush against D-ring 2 Anchor. For concrete installation, drill (2) 3 1/2" holes at bolt installation locations; 1/2" play will be left at bottom of bolt hole. Then, install D-ring 2 Anchor with bolts.
- Install D-ring 2 Hole Anchor so intended loads will always be applied in a proper and compatible manner; ALWAYS adhere to proper/improper loading requirements as shown.
- Attach complete and compatible PFAS to D-Ring 2 Anchor.



Instructions for Installation of Roof Anchor (SA65)

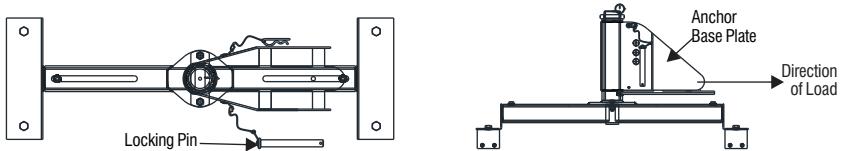
INSTRUCTIONS FOR USAGE:

- Place Anchor at selected installation location.
 - Minimum substrate thickness required as follows:
 - Wood (in field): 3/4" CDX or better
 - Wood (truss): 3.5" combined thickness or better
 - Metal: 20g or better
 - For Wood substrates, install all (6) provided 1 1/4" x 3" lag screws OR (12) provided 3" 16d nails in fastener installation holes.
 - For Metal substrates of 20g or better, install (6) 1 1/4" x 3" metal deck screws (not provided).
 - Screws must be installed in bottom, middle, and top fastener installation holes on each side of Anchor.
 - Nails must be installed in all available fastener installation holes. Fasteners must be fully embedded in substrate.
 - NEVER use Anchor in permanent installations. Anchor may be removed and reinstalled in multiple installation locations.
 - ALWAYS inspect the Anchor prior to each installation. ALWAYS use new fasteners for each new installation.
 - Attach complete and compatible PFAS to Anchor O-ring. NEVER make attachments to any other part of Anchor.
- * This Anchor may be used in combination with a Horizontal Lifeline (HLL). All set-up, installation, and use of HLLs must be done under the supervision of a Qualified Person.



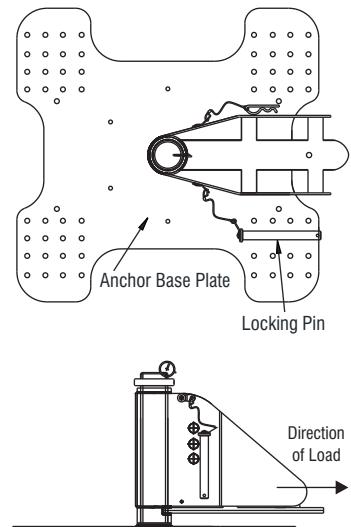
Instructions for Installation of Stand Alone Post for Retractable Fall Arrester on Standing Seam Roof (SA 71)

1. Loosen (4) Mounting Bolts from their respective Anchor so that there is space for Anchor to fit over applicable metal roof seams. Place Standing Seam Roof Clamp at the selected installation location, and adjust Telescoping Tubing so that the bent sides of Anchor will hook underneath lip of metal roof seam.
3. Place Roof Clamp around roof seams. Ensure that bent side of each clamp is underneath the lip of each respective metal roof seam. Flat sides of Anchor MUST be flush with flat sides of roof seams
4. Tighten all Mounting Bolts to secure Standing Seam Roof Clamp to metal roof. ALL Mounting Bolts MUST be torqued to 50 foot-pounds.
5. Prior to EACH use, re-torque all Mounting Bolts to 50 foot-pounds.
6. To install Leading Edge SRL,
 - a) Remove Clevis Pin; b) Slide SRL into Carriage;
 - c) Reinsert Clevis Pin through Carriage and through SRL anchorage connector attachment point;
 - d) Insert Hitch Pin through Clevis Pin and ensure both pins are snug and fully secured.



Instructions for Installation of Stand Alone Post for Retractable Fall Arrester on Trapezoidal Roof (SA 72)

1. At selected installation location, place the Anchor with edge of baseplate perpendicular to applicable fall hazard. Baseplate must lie flush with roof surface.
2. At all (36) fastener installation locations, install fasteners applicable to substrate type. All fasteners must be selected and deemed compatible by a Competent Person. KARAM recommends #14x10 2" steel hex head screws. All fasteners MUST be used. All fasteners MUST be fully embedded in substrate. In metal installation applications, NEVER install fasteners over roof valley.
3. The Anchor for temporary installation applications ONLY. Always use new fasteners for each new installation application.
4. Install SRL into the Anchor. If using 50'-65' SRL, install Retractable Swivel Adapter (#10975) according to manufacturer's instructions, prior to installation of SRL: 1) Remove Hitch Pin from Clevis Pin and remove Clevis Pin from Carriage; 2) Insert SRL into Carriage; 3) Insert Clevis Pin through Carriage and through SRL connection point; 4) Insert Hitch Pin through Clevis Pin; 5) Ensure Hitch Pin, Clevis Pin, and SRL are fully secured, and no risk exists for accidental detachment.
5. It is permitted to use the Anchor in combination with connecting equipment other than an SRL. The snap hook or karabiner of equipment such as a lanyard or vertical lifeline may be connected directly to the Anchor clevis pin, provided the connection is deemed compatible by the jobsite Competent Person. Always ensure the clevis pin is fully locked and secure prior to making any connections.

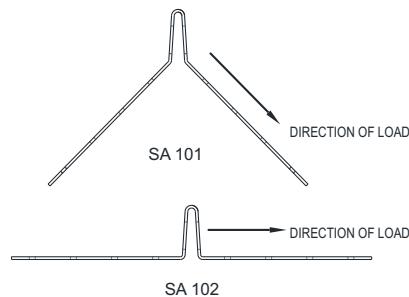


Instructions for Installation of Steel Anchor (SA 101, SA 102)

This Steel Anchor is designed to be used as a temporarily installed anchorage connector on wood frame structures

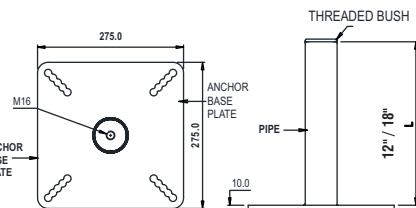
- Spread the anchor base legs apart to match the surface it will be mounted on, either a roof peak or flat surface.
- Position the anchor on the roof such that the nailing holes along with the center of the legs are over a framing member.
- Push down the anchor to butt the legs over the surface and insert 16 nos of nails.

The Anchor can be fixed so that the load impact is in the directions shown in the figure below :-



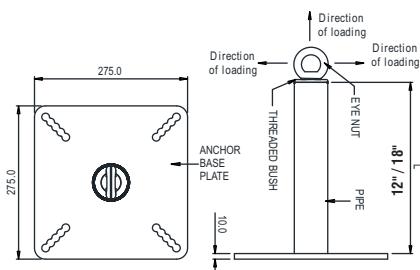
Instructions for Installation of Anchor (SA 111(12), SA 111(18))

- Anchor Post can be installed on different structures like concrete, I- beam & other metal structures by use of their suitable fasteners & other attachments. The post are available in sizes of 12" & 18" and can be selected depending on the position.
- Anchor post can be used on concrete by using chemical fastener.
- Fix the plate onto all 4 chemical fastener studs & tighten the nuts on the top of the post plate.
- Threaded top can be used to fix suitable Eye Bolt/ Swivel attachment to create the anchor point.
- Now it can be used as an Anchor post.
- For fixing on metal Structure or I-beam, Specialized Fisher plates & fasteners to be used.
- Can accommodate pitch distance from 150.0mm to 220.0mm .
- M12 Chemical Fastener ; Make : Hilti is to be used.
- On metal structure SA-25(01)SUB1 fisher plate and fastener is to be used.



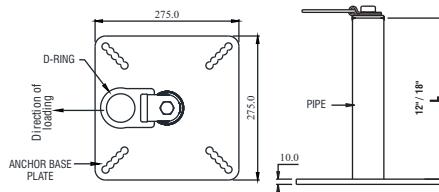
Instructions for Installation of Anchor with eye nut (SA 111A(12), SA 111A(18))

- Anchor Post can be installed on different structures like concrete, I- beam & other metal structures by use of their suitable fasteners & other attachments. The post are available in sizes of 12" & 18" and can be selected depending on the position.
- Anchor post can be used on concrete by using chemical fastener.
- Fix the plate onto all 4 chemical fastener studs & tighten the nuts on the top of the post plate.
- Eye nut on top can be used as an anchor point.
- For fixing on metal Structure or I-beam, Specialized Fisher plates & fasteners to be used.
- Can accommodate pitch distance from 150.0mm to 220.0mm .
- M12 Chemical Fastener ; Make : Hilti is to be used.
- On metal structure SA-25(01)SUB1 fisher plate and fastener is to be used.



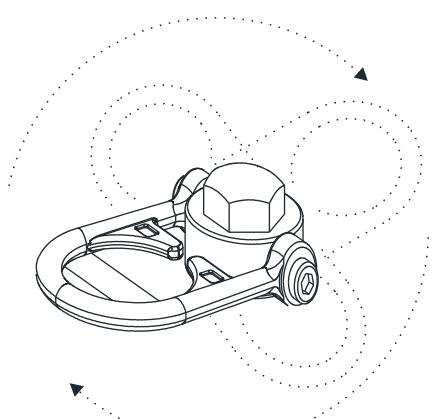
Instructions for Installation of Anchor with Swivel Eye (SA 111B(12), SA 111B(18))

- Anchor Post can be installed on different structures like concrete, I-beam & other metal structures by use of their suitable fasteners & other attachments. The post are available in sizes of 12" & 18" and can be selected depending on the position.
- Anchor post can be used on concrete by using chemical fastener.
- Fix the plate onto all 4 chemical fastener studs & tighten the nuts on the top of the post plate.
- Swivel D-ring assembly on top can be used as an anchor point.
- For fixing on metal structure or I-beam, specialized fisher plates & fasteners to be used.
- Can accommodate pitch distance from 150.0mm to 220.0mm.
- M12 Chemical Fastener ; Make : Hilti is to be used.
- On metal structure SA-25(01)SUB1 fisher plate and fastener is to be used.



Instructions for Installation of Swivel Anchor Post (SA 118, SA 118C)

The Swivel Anchor Post is designed to function as an interface between the anchorage and fall protection, work positioning, rope access, or rescue system. This serves the purpose of coupling the system to the anchorage. Any references to "anchorage connector" in this manual include, and apply to, the Swivel Anchor Post.



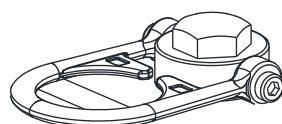
Working load: 1000 lbs (453 kgs)

Can be used with Horizontal Life Line Systems

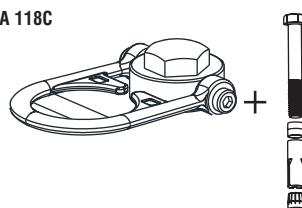
Weight: 1.2-lbs (544.31g)

Materials: Zinc plated steel

SA 118



SA 118C

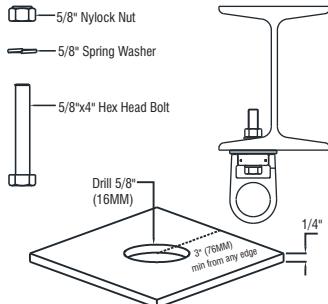


to be installed on concrete structure with help of 5/8" x 5" long Mechanical fastener.

SA 118M

- A bolt no shorter than 4' (100mm) with a grade 5-8 (or equivalent) with a locking nut and washer must be used for all steel applications. A swivel anchor must be flushed with steel surface. For all metric applications a 16mm bolt may be used in place of 5/8"-16.

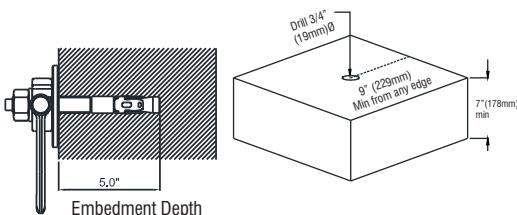
Torque Range: 75-90 ft-lbs (100-120Nm)



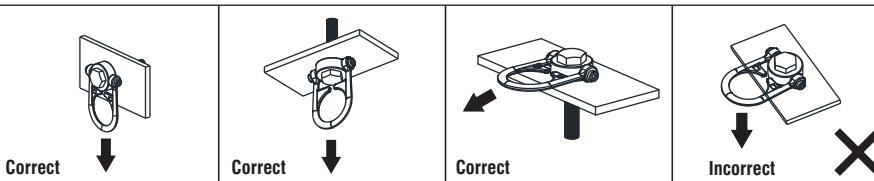
SA 118C

- Use a proper drill & bit for concrete. (SDS drill bit)
- Drill a 3/4" (19mm) hole no less than 5" (127mm) deep 9" (229mm) away from any edge.
- Hole must be straight & perpendicular to surface.
- Hole must be free of debris
- Concrete strength must be at least 3000psi (20.7MPa) and no less than 7" (178mm) thick.

Torque Range: 3-5 full turns beyond hand tight



Direction of Loading



Instructions for Installation of Concrete Anchor Plate With D-RING (PN 119) / (SA119B)

ANCHOR LOCATION: Anchor plates should only be located at points that are structurally sound and in accordance with the given system requirements. All anchoring holes should be at a minimum of 4 inches from the free edges. In case of two or more concrete anchors mounted on one anchorage, a separation gap of a minimum of 10 inches should exist.

Note: The use of plates as guide is a must; it shall prevent the drills from wandering, while drilling holes and installing bolts.

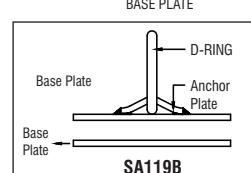
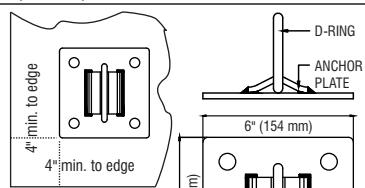
INSTALLING THE ANCHOR: Anchor Installation will require drilling holes in the concrete surface and insertion and affixation of accompanying anchor bolts.

STEP-1 Take a 0.5 inch long carbide drill bit and drill four holes, each 3.75 inches deep. Use compressed air or a blow-out bulb to clean the holes post drilling.

STEP-2 Take the washer and nut and assemble it into the bolt. Now, hold the nut and screw it into the bolt until it is completely flush with the top part, which protects the threads. Insert the bolt into the holes on the anchor plate until the washer is pressed between the nut and the plate.

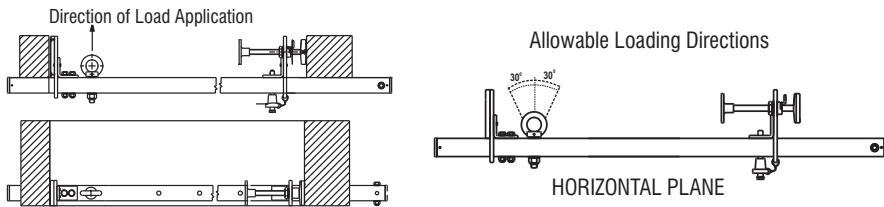
STEP-3 Tighten the bolt with a torque of 55 ft. lbs for installation and let it expand. The minimum immersion in concrete should be of at least 2.25 inches.

Note:- SA 119B comes with base plate for installation on Beam.



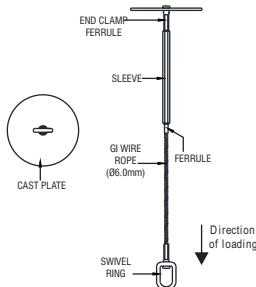
Instructions for Installation of Door Anchor (PN 802A)

- Door anchor is intended to be compressed against the Door or Window frame jamming itself between the two vertical sides.
- Remove the locking pin & adjust the opening of the door anchor arms, so that the jamming frames can take their places, now insert the locking pin into nearest hole of the door anchor body.
- Set the locking lever into open position & tight the cup washer for proper grip. Lock the threaded bar by moving the locking lever into closed position.
- Both Anchorage eyes can be used as the anchorage points.



Instructions for Installation of Anchor (SA 104 / SA 104(6ft))

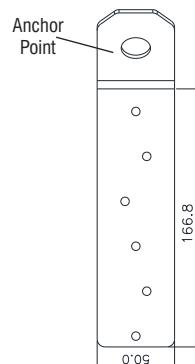
- The Anchor device is used to make the Anchor point on concrete, steel decking or steel grating. Anchor point can be used to make a personal fall protection, restraint system, rescue or work positioning.
- Anchor can be installed either at time of pouring of concrete or by making a drill on concrete. Make a drill of 1-3/4" through the concrete & clean the hole by air pressure & insert the Anchor from top side of concrete structure.
- Now Anchor is ready to use.
- Thickness of concrete & distance from edge should be duly checked & approved by a qualified structural engineer.



Instructions for Installation of Anchor Plate (SA 126)

Temporary Anchor Installation (Majorly for wooden roof slopes/surfaces):

- Place the anchor at distance of about 6" from the ridge or the hip line of the roof on the downward slope and about 6' from the gable end and exactly above the Top chord centre, with anchor leg and connector hole facing on the downside.
- Now, Insert the provided 6 fasteners in the holes present on the leg of the anchor at an angle off from the centre and inserted towards the centre of the top chord. Please ensure no blow-outs happen while inserting the fasteners in the top chord centre. (**FIG. A**)
- The anchor is ready for use.



Permanent Anchor Installation (For roofs and floors made of construction material)

- Mark the location of the top chord centre line and place the anchor above it as indicated in the figure above. Make sure that the layer of construction material below the anchor is not thicker than 6mm.
- Place the stem of the anchor at the point where the stem bend line intersects the line of the roofing membrane which is to be overlayed on it.
- Insert the provided fasteners and necessarily ensure that they are waterproofed using a Butyl Strip, 7" in length, or any other approved membrane

- Pull off the back paper and press the butyl strip onto the leg of the anchor as shown in the figure.
- Now, layover the roofing material over the anchor in a way that leaves the stem part exposed.
- Leave the anchor area to dry for some time.
- The anchor is ready to use.

ANCHOR USE ORIENTATION FOR FALL ARRESTING LOADS OF FREE FALL-

For SA 126 usage, the free fall must happen downside and in line with the anchor leg as indicated in the **Figures A**. For example, See the circles marked in the figures and observe the direction of the lanyard. Also, the user must adjust their position with the lifeline in a way that prevents travelling beyond the Gable Leading Edge or any area exposing a free fall beyond the Ridge/ Hip line. This is what happens in cases of wrong installation as shown in **Fig G**. Another way of wrong installation is indicated in the **Fig-H**. Additionally, some anchors can be required to prevent hazards of swing or free falls of more than 6ft. especially along the hip ends.

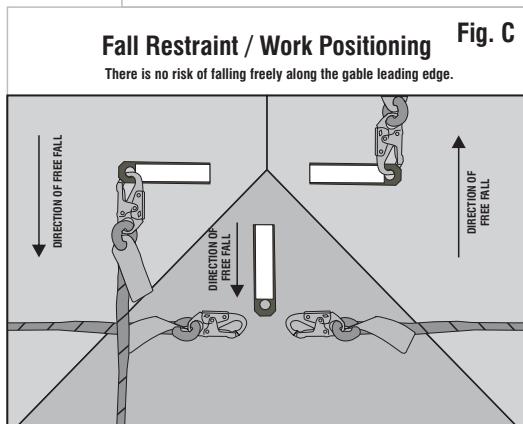
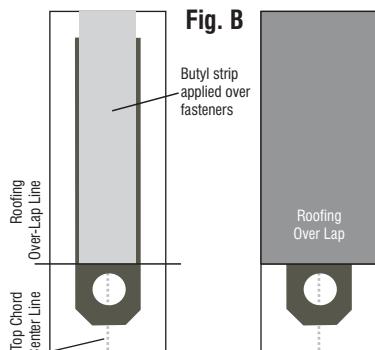
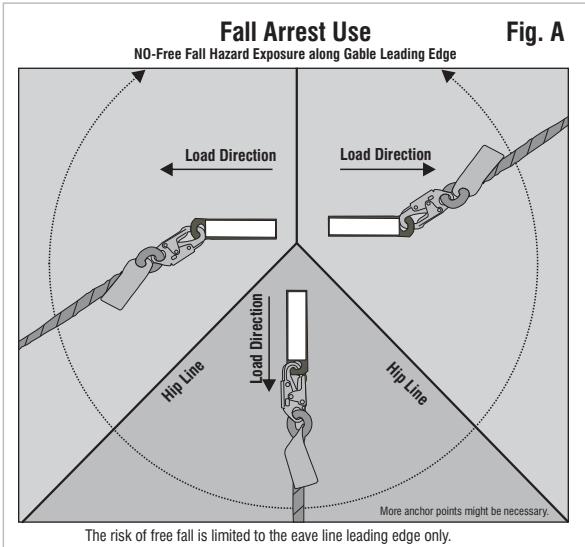
USE FOR FALL RESTRAINING:

The anchor can be used for Fall Restraining, using the process of "Side Loading". Under this, the force is applicable at right angles (perpendicular) to the anchor leg and it is allowed to be done for Fall Restraint purposes only. This can be illustrated using the **fig. C**.

MITIGATION OF FALL HAZARDS:

Fall Hazards can be prevented using the following methods,

- Reduce excess slack on the lifeline by adjusting the rope grab on the same.
- Affix the anchors at places that provide sufficient points for tie-off, thus reducing the travel distance between two consecutive anchor points.
- A job plan should be at ready addressing the possibilities and potential causes of fall hazard during each project. This includes plan for anchor positioning as well.
- Prepare a note on Fall Plan with reference to each site of use.
- Make sure to use Personal Protective Equipment (PPE) which is compatible of usage with the anchor.



FALL INDICATOR STEM:

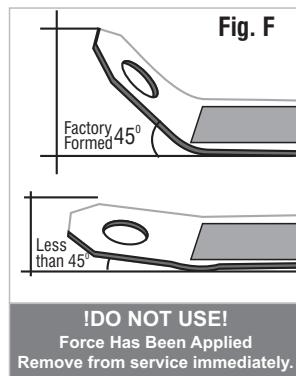
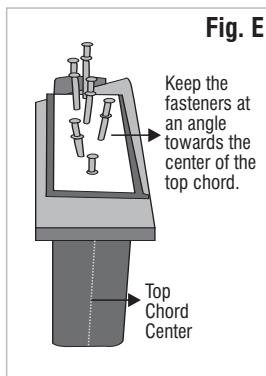
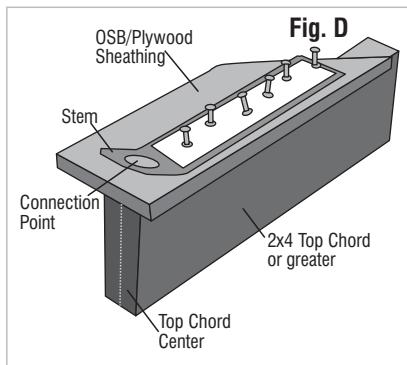
The stem of the anchor is designed at an angle of about 45° as shown in the **Figure-F**. When a force of about 450-600 lbs acts upon this stem (as a result of fall), over the edge, it bends down. This bended stem then becomes a visual indicator of a previous fall arrest and non-suitability for further use.

PRE-USE INSPECTIONS:

Before each use of the anchor make sure to perform a thorough inspection of interior and exterior factors. DO NOT USE the anchor, if any of the below mentioned conditions exist, please disengage the anchor immediately from use.

- From Interior/ Underside of Framing Inspection
- Blowing out of Top Chord
- Fasteners coming out through sheathing
- Damages on sheathing or top chords
- From Exterior at Anchor attachment
- Visible fasteners are less than 6 in number.
- The heads of the fasteners are popped up and are not flush completely with the leg surface of the anchor.
- Any cuts or deformities present on leg, connector or stem of the anchor.
- Missing or damaged product label.

WARNING: Metal fatigue can result from rebending the anchor stem or leg causing the anchor to fail when subjected to a free fall or static load.



13. **ANCHORAGE STRENGTH :** The Anchorage strength required depends on the application type. Following are the requirements of ANSI Z359.1 for these application types:-

- **Anchorage & anchorage strength :** Anchorage and anchorage strength requirements are dependent on the full body harness application. In accordance with ANSI Z359.1, anchorages selected for fall Arrest Systems must meet the anchorage strength requirements defined in below Table.

Table - Anchorage Strength Requirements

Fall Arrest ¹	Non-Certified Anchorage:	5000 lbs. (23 kN)
	Certified Anchorage ² :	2 Times the Maximum Arresting Force for Certified Anchorage
Restraint ¹	Non-Certified Anchorage	1,000 (4,5 kN)
	Certified Anchorage ² :	2 times the foreseeable force for certified anchorages.
Work Positioning ¹	Non-Certified Anchorages	3,000 lbs (13.3 kN)
	Certified Anchorage ² :	2 times the foreseeable force for certified anchorage.
Rescue ¹	Non-Certified Anchorage	3,000 lbs (13.3 kN)
	Certified Anchorage ² :	5 times the foreseeable force for certified anchorage.
Climbing	The structure which a climbing system is attached must sustain the loads required by that particular system. See the instructions for the climbing system for requirements.	

1 Multiple Systems: When more than one of the defined system is attached to an anchorage, the strength defined for Non-Certified or certified anchorage shall be multiplied by the number of systems attached to the anchorage.

2 Certified Anchorage: An anchorage for fall arrest, positioning, restraint, or rescue systems that a qualified person certifies to be capable of supporting the potential fall force that meet the criteria for a certified anchorage prescribed in this standard.

- **Field Serviceability Testing** - It is not required and also not recommended to perform this testing by the End user.
- **Fall Arrest:** Anchorages selected for fall arrest systems shall have a strength capable of sustaining static loads applied in the directions permitted by the system of at least: 1. 5000 lbs. (23 kN) for non-certified anchorages, or 2. Two times the maximum arresting force for certified anchorages. When more than one fall arrest system is attached to an anchorage, the strengths set forth in (1) and (2) above shall be multiplied by the number of systems attached to the anchorage.
- **As Per OSHA:** Anchorages used for attachment of personal fall arrest systems shall be independent of any anchorage being used to support or suspend platforms and capable of supporting at least 5,000 lbs. (23 kN) per user attached, or be designed, installed and used as part of a complete PFAS which maintains a safety factor of at least two, and is under the supervision of a qualified person.
- **Work Positioning:** The structure to which the work positioning system is attached must sustain static loads applied in the directions permitted by the work positioning system of at least 3,000 lbs., or twice the potential impact load, whichever is greater. See OSHA. When more than one work positioning system is attached to an anchorage, the strengths stated above must be multiplied by the number of work positioning systems attached to the anchorage.
- **Restraint:** Anchorages selected for restraint and travel restraint systems shall have a strength capable of sustaining static loads applied in the directions permitted by the system of at least: 1. 1,000 lbs. (4.5 kN) for non-certified anchorages, or 2. Two times the foreseeable force for certified anchorages. When more than one restraint and travel restraint system is attached to an anchorage, the strengths set forth in (1) and (2) above shall be multiplied by the number of systems attached to the anchorage.
- **Rescue:** Anchorages selected for restraint and travel restraint systems shall have a strength capable of sustaining static loads applied in the directions permitted by the system of at least: 1. 3,000 lbs. (13.3 kN) for non-certified anchorages, or 2. Five times the foreseeable force for certified anchorages. When more than one restraint and travel restraint system is attached to an anchorage, the strengths set forth in (1) and (2) above shall be multiplied by the number of systems attached to the anchorage.
- **Fall clearance :** If there is a risk of fall or if the only anchorage is below the attachment points on the harness, it is essential to use a lanyard provided with an energy absorber. Before using a shock-absorbing lanyard, check that there is sufficient fall clearance below the user to prevent any collision with the structure or the ground.

14. PERIODIC EXAMINATION:

Keep these instructions with the product and fill in the identification sheet, entering the information taken from the markings.

- The periodic examination is essential to test the resistance and condition of the equipment and to guarantee the safety of the user.
- A qualified person must examine this equipment at least once each year in strict compliance with the instructions of the manufacturer and the previous check must be recorded on the attached sheet.
- The frequency of inspection should be increased in accordance with the regulations, if the equipment is in heavy usage or if the equipment is used in harsh environments. Also Check that the markings are legible.

15. MATERIAL OF CONSTRUCTION:

- **Material :** Please refer technical specification sheet.

16. SYSTEM REQUIREMENTS:

- **Compatibility of Components:** KARAM Fall Protection equipment is designed to be used with KARAM approved components. Please contact KARAM if you have a question regarding compatibility. Making substitutions without approval from KARAM Fall Protection may lead to injuries and or death by compromising the safety and reliability of the complete system. A Qualified person can make a determination on compatibility of equipment from different manufacturers.

- **Compatibility of Connectors:** Connectors (D-rings, hooks, karabiners) must be capable of supporting at least 5000 lbs. (23 kN). Do not use equipment that is not compatible. Non-compatible connectors may unintentionally disengage. Self-locking snap hooks and Karabiners are required by CSA, ANSI and OSHA. Connectors must be compatible in size, shape, and strength.

- **Making Connections:** Only use self-locking snap hooks and Karabiners with any KARAM Fall Protection equipment. Do not use equipment that is not compatible.

- **TRAINING:**

It is the responsibility of the users to ensure that they read, understand, and follow all instructions and are trained in the care and use of this device. Training should be repeated periodically and any time there is a change of components within the system. Training must be conducted without exposing the trainee to a fall hazard.

- **As Per OSHA:** Anchorages used for attachment of personal fall arrest systems shall be independent of any anchorage being used to support or suspend platforms and capable of supporting at least 5,000 lbs. (23kN) per user attached, or be designed, installed and used as part of a complete PFAS which maintains a safety factor of at least two, and is under the supervision of a qualified person.

17. OTHERS:

- **MAINTENANCE & CLEANING:**

Repairs to equipment can be made only by a KARAM representative or person or entity authorized by KARAM. Contact KARAM for maintenance and repair. Cleaning after use is important for maintaining the safety and life of the equipment. Cleanse the equipment of all dirt, corrosives, and contaminants. If the equipment cannot simply be wiped clean, use a mild soap and water. Rinse, wipe, and hang to dry in shade.

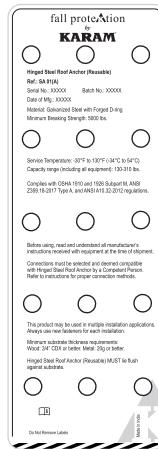
- **STORAGE:**

Store the anchorage connector component in a cool, dry and clean place out of direct sunlight. Avoid areas where heat, moisture, light, oil, and chemicals or their vapors or other degrading elements may be present. Equipment which is damaged or in need of maintenance should not be stored in the same area as usable equipment. Heavily soiled, wet, or otherwise contaminated equipment should be properly maintained (e.g. dried and cleaned) prior to storage.

Prior to using equipment which has been stored for long periods of time, a Formal Inspection should be performed by a competent person. For harnesses with Dielectric buckles, pass-thru buckles or Quick Connect Buckles, store the harness with the buckles connected.

18. MARKINGS:

SA 01(A)



SA 68A(SS)

KARAM ANCHOR											
Ref.: SA 68A (SS)											
Serial No.: XXXXX Batch No.: XXXXXX											
Minimum Breaking Strength: 5000 lbs.											
Capacity: 130-310 lbs.											
Service Temperature: -30°F to 130°F (-34°C to 54°C)											
Complies with ANSI Z359.18-2017 Type A											
DOM: _____											
Refer to instructions for proper connection methods. DO NOT make connections with tools.											
Do not connect with sharp or abrasive edges and surfaces, or any electrical, thermal, or chemical hazards.											
Material of Construction: D-ring - High Strength Alloy Steel, Anchor Plate - Stainless Steel											
ANY ALTERATION, ABUSE OR MISUSE OF THIS PRODUCT VOIDS THE WARRANTY.											
[RE] Read Instruction Manual Carefully Before Use											
Before every use, user must inspect the product. Every 6 months a competent person must complete final inspection of the product and record results. Date of First Use: _____ Product inspection interval may be as long as product passes all inspection requirements.											
Inspection Grid											
D	J	F	M	A	S	O	N	D	J	F	M
○	○	○	○	○	○	○	○	○	○	○	○

DO NOT REMOVE LABELS.

SA 28

KARAM Edge Fix Anchor											
Ref.: SA 28											
Serial No.: XXXXX Batch No.: XXXXXX											
Mfg. Date: XXXXXX											
Material: Galvanized Steel											
Minimum Breaking Strength: 5000 lbs.											
Service Temperature: -30°F to 130°F (-34°C to 54°C)											
Capacity: One part uses one as a single part to hold up to 130 lbs. Two parts used as part of Karam F2800 or F2810 fall protection systems											
Complies with ANSI Z359.18-2017 Type A and ANSI A10.32/12.2012 & OSHA 1926 regulations											
[RE] WARNING											
Manufacturer's instructions must be read and understood prior to use. Instruction specifies how to use the equipment and must be followed for proper use, maintenance and inspection. Any alteration, misuse or failure to follow manufacturer's instructions can result in serious injury or death. Make only connections with sharp or abrasive edges and surfaces, or any electrical, thermal, or chemical hazards. Equipment connecting the equipment near hazardous, thermal, electrical or chemical sources must be removed from use. It may be used with personal fall arrest systems.											
For every use, user must inspect the product. Every 6 months a competent person must complete final inspection of the product and record results. Date of First Use: _____											
Product lifetime is indefinite as long as equipment passes all inspection requirements.											
If equipment fails inspection, IMMEDIATELY REMOVE FROM SERVICE.											
DO NOT REMOVE LABELS.											

SA 71

KARAM Stand Alone Post for Self-Retracting Lifeline on Standing Roof											
Ref.: SA 71											
Stand Alone Post for Self-Retracting Lifeline on Standing Roof											
SA 71											
Before each use, the user must read and understand all manufacturer's instructions associated with equipment at the time of shipment.											
Complies with all OSHA 1910, OSHA 1926 Subpart M, ANSI Z359.18-2017 Type D and ANSI A10.32/2012 regulations.											
Serial No.: XXXXX											
Batch No.: XXXXXX											
Mfg. Date: XXXXXX											
Minimum Breaking Strength: 5000 lbs.											
Capacity Range: 130-310 lbs.											
Service Temperature: -30°F to 130°F (-34°C to 54°C)											
Material: ED-coated Alloy Steel											
Ensure all connections and PFAS equipment are selected and deemed compatible with the Stand Alone Post by a Competent Person.											
All fasteners applicable to substrate must be used and must be fully embedded in substrate.											
[RE] WARNING											
Avoid all contact with sharp or abrasive edges and surfaces, or any electrical, thermal, or chemical hazards.											
ANY ALTERATION, ABUSE OR MISUSE OF THIS PRODUCT VOIDS THE WARRANTY.											
Made in India											
Before every use, user must inspect the product. Every 6 months a competent person must complete final inspection of the product and record results. Date of First Use: _____ Product inspection interval may be as long as product passes all inspection requirements.											
Inspection Grid											
D	J	F	M	A	S	O	N	D	J	F	M
○	○	○	○	○	○	○	○	○	○	○	○

DO NOT REMOVE LABELS.

SA 72

KARAM Stand Alone Post for Self-Retracting Lifeline on Trapezoidal Roof											
Ref.: SA 72											
Stand Alone Post for Self-Retracting Lifeline on Trapezoidal Roof											
SA 72											
Before each use, the user must read and understand all manufacturers' instructions associated with equipment at the time of shipment.											
Complies with all OSHA 1910, OSHA 1926 Subpart M, ANSI Z359.18-2017 Type D and ANSI A10.32/2012 regulations.											
Serial No.: XXXXX											
Batch No.: XXXXXX											
Mfg. Date: XXXXXX											
Minimum Breaking Strength: 5000 lbs.											
Capacity Range: 130-310 lbs.											
Service Temperature: -30°F to 130°F (-34°C to 54°C)											
Material: ED-coated Alloy Steel											
Ensure all connections and PFAS equipment are selected and deemed compatible with the Stand Alone Post by a Competent Person.											
All fasteners applicable to substrate must be used and must be fully embedded in substrate.											
[RE] WARNING											
Avoid all contact with sharp or abrasive edges and surfaces, or any electrical, thermal, or chemical hazards.											
ANY ALTERATION, ABUSE OR MISUSE OF THIS PRODUCT VOIDS THE WARRANTY.											
Made in India											
Before every use, user must inspect the products. Every 6 months a competent person must complete final inspection of the products and record results. Date of First Use: _____ Product inspection interval may be as long as product passes all inspection requirements.											
Inspection Grid											
D	J	F	M	A	S	O	N	D	J	F	M
○	○	○	○	○	○	○	○	○	○	○	○

DO NOT REMOVE LABELS.

KARAM Stand Alone Post for Self-Retracting Lifeline on Trapezoidal Roof											
Ref.: SA 72											
Stand Alone Post for Self-Retracting Lifeline on Trapezoidal Roof											
SA 72											
Before each use, the user must read and understand all manufacturer's instructions associated with equipment at the time of shipment.											
Complies with all OSHA 1910, OSHA 1926 Subpart M, ANSI Z359.18-2017 Type D and ANSI A10.32/2012 regulations.											
Serial No.: XXXXX											
Batch No.: XXXXXX											
Mfg. Date: XXXXXX											
Minimum Breaking Strength: 5000 lbs.											
Capacity Range: 130-310 lbs.											
Service Temperature: -30°F to 130°F (-34°C to 54°C)											
Material: ED-coated Alloy Steel											
Ensure all connections and PFAS equipment are selected and deemed compatible with the Stand Alone Post by a Competent Person.											
All fasteners applicable to substrate must be used and must be fully embedded in substrate.											
[RE] WARNING											
Avoid all contact with sharp or abrasive edges and surfaces, or any electrical, thermal, or chemical hazards.											
ANY ALTERATION, ABUSE OR MISUSE OF THIS PRODUCT VOIDS THE WARRANTY.											
Made in India											
Before every use, user must inspect the products. Every 6 months a competent person must complete final inspection of the products and record results. Date of First Use: _____ Product inspection interval may be as long as product passes all inspection requirements.											
Inspection Grid											
D	J	F	M	A	S	O	N	D	J	F	M
○	○	○	○	○	○	○	○	○	○	○	○

DO NOT REMOVE LABELS.

SA 52

KARAM fall protection											
by											
Aluminum Anchor for Standing Seam Roof (SA 52)											
Ref.: SA 52											
Serial No.: XXXXX											
Batch No.: XXXXXX											
Material: High Strength Aluminum Alloy											
Minimum Breaking Strength: 5000 lbs.											
Service Temperature: -30°F to 130°F (-34°C to 54°C)											
Capacity range: 130-310 lbs.											
Complies with all OSHA 1910, OSHA 1926 and 1928 Subpart M, ANSI Z359.18-2017 Type A and ANSI A10.32/2012 regulations.											
[RE] WARNING											
Immediately remove from service if exposed to heat.											
NEVER use with horizontal roof.											
ANY ALTERATION, ABUSE OR MISUSE OF THIS PRODUCT VOIDS THE WARRANTY.											
Made in India											
Before every use, user must inspect the products. Every 6 months a competent person must complete final inspection of the products and record results. Date of First Use: _____ Product inspection interval may be as long as product passes all inspection requirements.											
Inspection Grid											
D	J	F	M	A	S	O	N	D	J	F	M
○	○	○	○	○	○	○	○	○	○	○	○

PN 802A

KARAM fall protection											
by											
Door Anchor (PN 802A)											
Ref.: PN 802A											
Serial No.: XXXXX											
Batch No.: XXXXXX											
Material: High Strength Aluminum Alloy											
Minimum Breaking Strength: 5000 lbs.											
Service Temperature: -30°F to 130°F (-34°C to 54°C)											
Capacity: 1 connection per Door Anchor. Avoid contact with sharp or abrasive edges and surfaces. Avoid contact with all hazards including but not limited to, electrical shock, corrosive substances, and excessive heat.											
Complies with all OSHA 1910, OSHA 1926 and 1928 Subpart M, ANSI Z359.18-2017 Type A and ANSI A10.32/2012 regulations.											
[RE] WARNING											
Immediately remove from use if exposed to heat.											
NEVER use with horizontal roof.											
ANY ALTERATION, ABUSE OR MISUSE OF THIS PRODUCT VOIDS THE WARRANTY.											
Made in India											
Before every use, user must inspect the products. Every 6 months a competent person must complete final inspection of the products and record results. Date of First Use: _____ Product inspection interval may be as long as product passes all inspection requirements.											
Inspection Grid											
D	J	F	M	A	S	O	N	D	J	F	M
○	○	○	○	○	○	○	○	○	○	○	○

SA 42-12

KARAM F不管道锚											
Ref.: SA 42-12											
Serial No.: SAMPLE											
Batch No.: SAMPLE											
Material: High Strength Alloy Steel											
Minimum Breaking Strength: 5000 lbs.											
Capacity: 130-310 lbs.											
Service Temperature: -30°F to 130°F (-34°C to 54°C)											
Complies with all OSHA 1910, OSHA 1926 and 1928 Subpart M, ANSI Z359.18-2017 Type A and ANSI A10.32/2012 regulations.											
[RE] WARNING											
Immediately remove from use if exposed to heat.											
NEVER use with horizontal roof.											
ANY ALTERATION, ABUSE OR MISUSE OF THIS PRODUCT VOIDS THE WARRANTY.											
Made in India											
Before every use, user must inspect the product. Every 6 months a competent person must complete final inspection of the product and record results.											
Inspection Grid											
D	J	F	M	A	S	O	N	D	J	F	M
○	○	○	○	○	○	○	○	○	○	○	○

SA 101**fall protection**

by

KARAM

Ref.: SA 101

Steel Anchor

Serial No.: XXXXX

Batch No.: XXXXXX

Date of Mfg.: XXXXX

Do Not Remove Labels

Read the user instructions before use.

before use.

Complies with all OSHA 1910, OSHA 1926 and 1928 Subpart M, ANSI Z359.18-2017 Type A and ANSI A10.32/2012 regulations.

[RE] WARNING

Immediately remove from use if exposed to heat.

NEVER use with horizontal roof.

ANY ALTERATION, ABUSE OR MISUSE OF THIS PRODUCT VOIDS THE WARRANTY.

Made in India

Before every use, user must inspect the product.

Every 6 months a competent person must complete final inspection of the product and record results.

Date of First Use: _____

INSPECTION LOG

Do Not Remove Labels

Read the user instructions before use.

before use.

Complies with all OSHA 1910, OSHA 1926 and 1928 Subpart M, ANSI Z359.18-2017 Type A and ANSI A10.32/2012 regulations.

[RE] WARNING

Immediately remove from use if exposed to heat.

NEVER use with horizontal roof.

ANY ALTERATION, ABUSE OR MISUSE OF THIS PRODUCT VOIDS THE WARRANTY.

Made in India

Before every use, user must inspect the product.

Every 6 months a competent person must complete final inspection of the product and record results.

Date of First Use: _____

INSPECTION LOG

Do Not Remove Labels

Read the user instructions before use.

before use.

Complies with all OSHA 1910, OSHA 1926 and 1928 Subpart M, ANSI Z359.18-2017 Type A and ANSI A10.32/2012 regulations.

[RE] WARNING

Immediately remove from use if exposed to heat.

NEVER use with horizontal roof.

ANY ALTERATION, ABUSE OR MISUSE OF THIS PRODUCT VOIDS THE WARRANTY.

Made in India

Before every use, user must inspect the product.

Every 6 months a competent person must complete final inspection of the product and record results.

Date of First Use: _____

INSPECTION LOG

Do Not Remove Labels

Read the user instructions before use.

before use.

Complies with all OSHA 1910, OSHA 1926 and 1928 Subpart M, ANSI Z359.18-2017 Type A and ANSI A10.32/2012 regulations.

[RE] WARNING

Immediately remove from use if exposed to heat.

NEVER use with horizontal roof.

ANY ALTERATION, ABUSE OR MISUSE OF THIS PRODUCT VOIDS THE WARRANTY.

Made in India

Before every use, user must inspect the product.

Every 6 months a competent person must complete final inspection of the product and record results.

Date of First Use: _____

INSPECTION LOG

Do Not Remove Labels

Read the user instructions before use.

before use.

Complies with all OSHA 1910, OSHA 1926 and 1928 Subpart M, ANSI Z359.18-2017 Type A and ANSI A10.32/2012 regulations.

[RE] WARNING

Immediately remove from use if exposed to heat.

NEVER use with horizontal roof.

ANY ALTERATION, ABUSE OR MISUSE OF THIS PRODUCT VOIDS THE WARRANTY.

Made in India

Before every use, user must inspect the product.

Every 6 months a competent person must complete final inspection of the product and record results.

Date of First Use: _____

INSPECTION LOG

Do Not Remove Labels

Read the user instructions before use.

before use.

Complies with all OSHA 1910, OSHA 1926 and 1928 Subpart M, ANSI Z359.18-2017 Type A and ANSI A10.32/2012 regulations.

[RE] WARNING

Immediately remove from use if exposed to heat.

NEVER use with horizontal roof.

ANY ALTERATION, ABUSE OR MISUSE OF THIS PRODUCT VOIDS THE WARRANTY.

Made in India

Before every use, user must inspect the product.

Every 6 months a competent person must complete final inspection of the product and record results.

Date of First Use: _____

INSPECTION LOG

Do Not Remove Labels

Read the user instructions before use.

before use.

Complies with all OSHA 1910, OSHA 1926 and 1928 Subpart M, ANSI Z359.18-2017 Type A and ANSI A10.32/2012 regulations.

[RE] WARNING

Immediately remove from use if exposed to heat.

NEVER use with horizontal roof.

ANY ALTERATION, ABUSE OR MISUSE OF THIS PRODUCT VOIDS THE WARRANTY.

Made in India

Before every use, user must inspect the product.

Every 6 months a competent person must complete final inspection of the product and record results.

Date of First Use: _____

INSPECTION LOG

Do Not Remove Labels

Read the user instructions before use.

before use.

Complies with all OSHA 1910, OSHA 1926 and 1928 Subpart M, ANSI Z359.18-2017 Type A and ANSI A10.32/2012 regulations.

[RE] WARNING

Immediately remove from use if exposed to heat.

NEVER use with horizontal roof.

ANY ALTERATION, ABUSE OR MISUSE OF THIS PRODUCT VOIDS THE WARRANTY.

Made in India

Before every use, user must inspect the product.

Every 6 months a competent person must complete final inspection of the product and record results.

Date of First Use: _____

INSPECTION LOG

Do Not Remove Labels

Read the user instructions before use.

before use.

Complies with all OSHA 1910, OSHA 1926 and 1928 Subpart M, ANSI Z359.18-2017 Type A and ANSI A10.32/2012 regulations.

[RE] WARNING

Immediately remove from use if exposed to heat.

NEVER use with horizontal roof.

ANY ALTERATION, ABUSE OR MISUSE OF THIS PRODUCT VOIDS THE WARRANTY.

Made in India

Before every use, user must inspect the product.

Every 6 months a competent person must complete final inspection of the product and record results.

Date of First Use: _____

INSPECTION LOG

Do Not Remove Labels

Read the user instructions before use.

before use.

Complies with all OSHA 1910, OSHA 1926 and 1928 Subpart M, ANSI Z359.18-2017 Type A and ANSI A10.32/2012 regulations.

[RE] WARNING

Immediately remove from use if exposed to heat.

NEVER use with horizontal roof.

ANY ALTERATION, ABUSE OR MISUSE OF THIS PRODUCT VOIDS THE WARRANTY.

Made in India

Before every use, user must inspect the product.

Every 6 months a competent person must complete final inspection of the product and record results.

Date of First Use: _____

INSPECTION LOG

Do Not Remove Labels

Read the user instructions before use.

before use.

Complies with all OSHA 1910, OSHA 1926 and 1928 Subpart M, ANSI Z359.18-2017 Type A and ANSI A10.32/2012 regulations.

[RE] WARNING

Immediately remove from use if exposed to heat.

NEVER use with horizontal roof.

ANY ALTERATION, ABUSE OR MISUSE OF THIS PRODUCT VOIDS THE WARRANTY.

Made in India

Before every use, user must inspect the product.

Every 6 months a competent person must complete final inspection of the product and record results.

Date of First Use: _____

INSPECTION LOG

Do Not Remove Labels

Read the user instructions before use.

before use.

Complies with all OSHA 1910, OSHA 1926 and 1928 Subpart M, ANSI Z359.18-2017 Type A and ANSI A10.32/2012 regulations.

[RE] WARNING

Immediately remove from use if exposed to heat.

NEVER use with horizontal roof.

ANY ALTERATION, ABUSE OR MISUSE OF THIS PRODUCT VOIDS THE WARRANTY.

SA 111(12)

fall protection
by
KARAM
Anchor - SA 111(12)

Serial No.: XXXXXX Batch No.: XXXXX

Date of Mfg.: XXXXX Material: Galvanized Steel

Minimum Breaking Strength: 500 lbs.

Service Temperature: -30°F to 130°F (-34°C to 54°C)

Capacity range (including all equipment):

ANSI A10.10, 29 CFR 1910.84(b)

Complies with OSHA 1910 and 1926 Subpart M, ANSI Z359.18-2017 TYPE A, and ANSI A10.32-2012 regulations.

Before use, read and understand all manufacturer's instructions received with equipment at the time of shipment.

Connections must be selected and deemed compatible with anchor by a Competent Person. Refer to instructions for proper connection methods.

Avoid contact with all hazards, including, but not limited to, electricity, chemicals, heat, sharp or abrasive edges and surfaces.

Refer to instructions for proper installation methods and fastener requirements.

WARNING

Immediately remove from use if exposed to the forces of a fall arrest.

If equipment fails inspection, immediately remove from service.

ANY ALTERATION, ABUSE OR MISUSE OF THIS PRODUCT VOIDS THE WARRANTY.

MAXIMUM 1 connection per Anchor.

Before use, user must inspect the products.

Every 6 months a competent person must complete final inspection of the product.

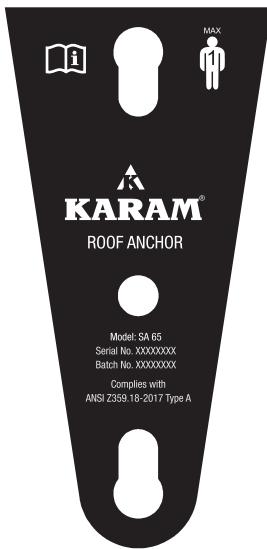
Product lifetime is indefinite as long as product passes all inspection requirements.

Do Not Remove Labels

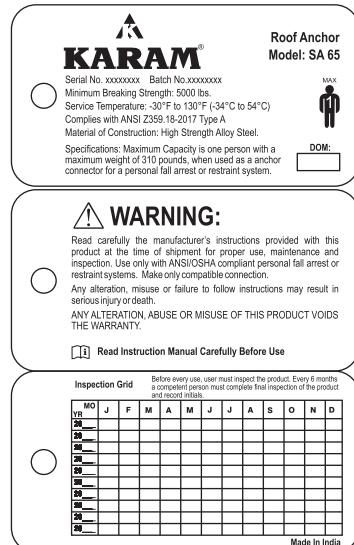
INSPECTION LOG

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					</td																																						

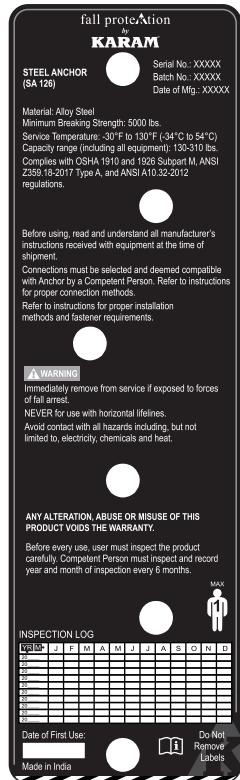
SA 65



SA 65



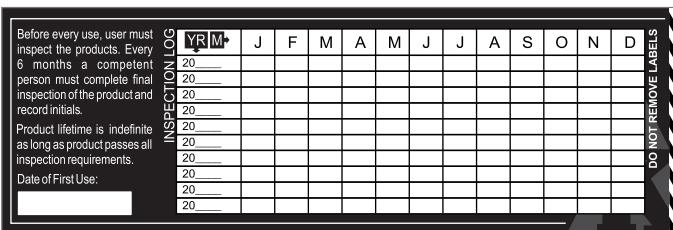
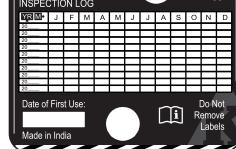
SA 126



SA 119 / SA 119B



Made in India



WARRANTY: All KARAM products bear 1-year warranty against manufacturing defects, applicable to unused KARAM products, from the date of purchase. However, KARAM shall not be liable for any accident or damage while the product is in use.

LIFESPAN: The estimated product Lifespan of this product is 10- years from the date of manufacturing. The following factors can reduce the lifespan of the product : intense use, contact with chemical substances, especially aggressive environment, extreme temperature exposure, UV exposure, abrasion, cuts, violent impacts, bad use, or maintenance.

DISCLAIMER: This information on the product is based upon technical data that KARAM obtained under laboratory conditions and believes to be reliable. KARAM does not guarantee results and takes no liability or obligation in connection with this information. As conditions of end-use are beyond our control, it is the user's responsibility to determine the hazard levels and the use of proper personal protective equipment. Persons having technical expertise should undertake evaluation under their own specific end-use conditions, at their own discretion and risk. Please ensure that this information is only to check that the product selected is suitable for the intended use. Any product that is damaged, torn, worn, or punctured should be immediately discontinued from usage.