# SNAP ON SAFETY ANCHOR

*The Snap-On Safety Anchor (SOS) is designed for attachment to most standing-seam snap-lock metal roof panels.*

**Meets the anchorage strength requirements of OSHA 1910.140 and 29 CFR 1926.502(d)(1) when installed and used in accordance with Metal Plus instructions.**

METAL PLUS LLC


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# OPERATION & INSTRUCTION MANUAL

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Thank you for purchasing our Snap on Safety Anchor (SOS).

Do not discard these instructions.

All persons using this device must first read and fully understand all warnings, instructions, and applicable regulations prior to its use as a part of an OSHA approved employee training program. Failure to do so can result in serious injury or death. All Users must be knowledgeable in the safe use of all equipment that is used in conjunction with the Snap on Safety Anchor (SOS). Users that have not read these instructions are strictly prohibited from using this equipment.

**IN-SERVICE INFORMATION**

Date Of First Use:_____

Trained by: _____

Assigned User:_____

# Operation & Instruction Manual

The Snap-On Safety Anchor (SOS) is designed for attachment to most standing-seam snap-lock metal roof panels. The anchor is engineered to fit and conform to most snap-lock seam profiles; however, compatibility varies by manufacturer, seam geometry, and panel design, and some profiles may not be compatible. Panel type and seam engagement shall be verified prior to installation. Photos shown are representative only and do not replace field verification. When properly installed, the SOS may be used as a single-seam, single-user anchor or as part of a compatible fall-protection system. The SOS consists of two 12-inch aluminum extrusions joined by a 3/8-inch stainless-steel hinge pin and secured with three bolts, washers, lock washers, and hex nuts, with a stainless-steel OSHA/ANSI-compliant D-ring for PFAS attachment. The device is intended for residential and commercial fall-arrest or fall-restraint applications when used with compatible fall-protection equipment.

## APPLICABLE SAFETY DEFINITIONS

Qualified person - A person with a recognized degree or professional certificate and with extensive knowledge, training, and experience in the fall protection and rescue field who is capable of designing, analyzing, evaluating, and specifying fall protection systems and rescue systems to the extent required by the applicable standards.

Authorized person - A person assigned by the employer to perform duties at a location where the person will be exposed to a fall hazard. This is someone that needs to use fall protection in the workplace.

Competent person - An individual designated by the employer to be responsible the immediate supervision, implementation , and monitoring of the employers managed fall protection program who, through training and knowledge, is capable of identifying, evaluating, and addressing existing and potential fall hazards, and who has the employer's authority to take prompt, corrective action with regards to such hazards.

Program Administrator - A person authorized by their employer to be responsible for managing the employer's fall protection program. This is someone that ensures a proper fall protection program is being used.

## GENERAL SAFETY GUIDELINES

**For use on steel standing seam panels (24 and 22) gauge only.**

The safe and effective use of the Snap on Safety Anchor is the ultimate responsibility of a Competent person. All safety protocols must be strictly followed, and it must be determined that the attachment point is structurally capable of withstanding a full impact on the Snap on Safety Anchor (SOS) while utilizing an OSHA compliant fall protection plan.

Do not alter or misuse this device in any way. Any altered or misused devices should be permanently removed from service and replaced.

A Competent person is responsible for evaluating site-specific conditions that may affect the safe installation and use of the Snap on Safety Anchor (SOS), in accordance with manufacturer specifications and applicable OSHA/ANSI standards.

A Competent person is responsible for determining the proper anchoring and installation location of the Snap on Safety Anchor (SOS) and connected components. Fall hazards, forces applied to anchors, and swing points should be carefully assessed. The Snap on Safety Anchor (SOS) should be installed under the direct supervision of a competent person in accordance with applicable regulatory requirements.

The Snap on Safety Anchor (SOS) is designed to withstand impact loads far higher than what the human body can withstand. A Competent person is responsible for determining how to effectively limit the impact on the user in case of a fall. An arrested fall can still result in serious injury or death; an effective rescue plan should include the use of trauma relief straps to reduce injury from suspension trauma.

Authorized users of the device MUST use shock absorbing lanyard, harness, or SRD/SRL capable of limiting impact load of 900lbs. Work conducted on or near metal roof surfaces may present potential for leading-edge or sharp-edge exposure. The employer's Qualified Person must evaluate the work area to determine whether a fall protection component(s) could come into contact with an edge during a fall event. If such exposure exists, only PFAS components specifically rated for leading-edge or sharp-edge use shall be selected and used.

A project specific rescue plan should be in place that allows the worker to rescue himself and allow others to rescue the worker. Do not use this device unless a compliant rescue plan is in place.

Authorized persons using this device should be properly trained by a Competent Person how to properly install and remove this device including the use of: Bolts, Nuts, Washers, Lock washers attached components, D-Rings, Storing, inspection, cleaning, recognizing fall hazards, and all forms of use of the Snap on Safety Anchor (SOS). One worker per anchor point.

Maximum worker weight including all tools and equipment shall not exceed 310lbs. per anchor. Limit of one person per anchor.

Users should be deemed fit for work at heights in accordance with employer's occupational health program and applicable regulatory or site-specific requirements.

These instructions shall be maintained for reference and for documenting the inspections.

## MAINTENANCE AND STORAGE

Any Snap on Safety Anchor (SOS) that has been subjected to the forces of a fall must be removed from service immediately and replaced new.

No modifications or repairs or replacement parts of the Snap on Safety Anchor (SOS) can be made. Any replacement parts such as nuts, bolts, washers, lock washers and labels must be purchased through Metal Plus, LLC #860-379-1327 or our website: www.metalplusllc.com. Only the manufacturer or an authorized representative may replace components or perform repairs. Devices requiring component replacement or repair shall be returned to the manufacturer for inspection, recertification, or replacement.

The Snap on Safety Anchor (SOS) is constructed of corrosion resistant materials, but it must be kept free of chemical, paint, grease, dirt and oil contamination. Clean using mild, non-abrasive, non-fragrant soap and warm water. Avoid solvents, bleach, or corrosive cleaners. Dry thoroughly before storage and keep away from moisture, heat, and light, or chemicals.

## INSPECTION

Prior to each use, **a Competent person and Authorized person** must inspect the Snap on Safety Anchor (SOS) for corrosion, deformation of all components nuts, bolts, washers and lock washers, cracking, and any damaged or missing labels. Any devices found to be deficient are to be removed from service immediately.

It is the responsibility of the employer's Qualified Person to determine that the project-specific standing seam roof profile is compatible with the Snap on Safety Anchor (SOS) and that the structural capacity of the seam is sufficient to support anticipated fall arrest loads.

The employer's Competent Person shall verify that the selected mounting location matches the configuration approved by the Qualified Person and that the seam is structurally sound, free of damage, and in suitable condition for installation.

Never use the Snap on Safety Anchor (SOS) on a seam that is not compatible or is not in structurally sound condition.

The Snap on Safety Anchor (SOS) shall be visually inspected by the user before each use and formally inspected by a competent person at least every (3) months. A Competent Person may determine that supplemental periodic inspections are warranted, based on factors such as conditions of use, environmental factors, company policy, and applicable regulatory requirements governing the intended use.

**Any Snap on Safety Anchor (SOS) that has been subjected to forces of a fall must be removed from service immediately.**

## PRODUCT SPECIFIC SPECIFICATIONS

Personal fall protection arrest: Snap on Safety Anchor (SOS) may be used as a personal fall arrest system to support a maximum of one worker with a max loaded weight of 310 lbs. The mounting location on the standing seam must be determined to be structurally capable of withstanding a fall arrest impact on the Snap on Safety Anchor (SOS). Free fall distance requirements must be determined by the employer's Qualified person in accordance with the selected PFAS manufacturer's specifications, site conditions, and applicable regulatory standards. The system must be configured to prevent contact with any lower level or obstruction during a fall. Maximum allowable roof pitch in fall arrest is 12/12.

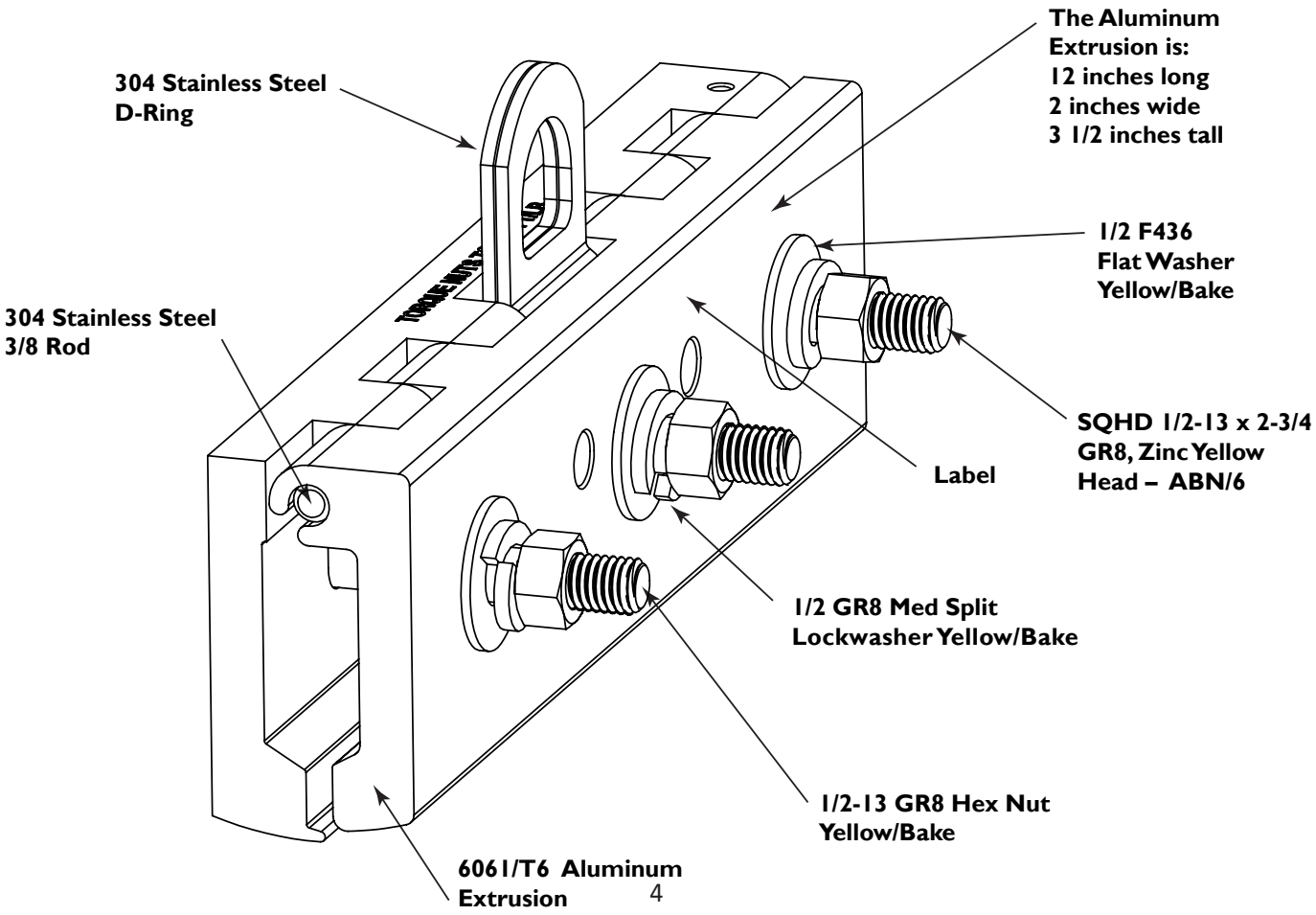
Restraint: Snap on Safety Anchor (SOS) may be used as a worker restraint device with a 1,000 lbs. impact load on the attachment point. No free fall allowed. Roof pitch is limited to 4/12 maximum.

**UNDER NO CIRCUMSTANCES IS THE MAXIMUM WORKER WEIGHT INCLUDING TOOL AND EQUIPMENT TO EXCEED 310 lbs.**

**Fall Clearance and Swing Falls danger:**

UNDERSTAND THE DANGER OF SWING FALL. KEEP YOUR LIFE-LINE, LANYARD OR OTHER ATTACHMENT BETWEEN YOUR HARNESS AND ANCHOR POINT IN AS MUCH OF A STRAIGHT ANGLE PERPENDICULAR (90 DEGREES) TO THE EDGE AS POSSIBLE – NEVER LESS THAN (45 DEGREES).

USERS MUST CONSULT THEIR EMPLOYER'S COMPETENT PERSON, SUPERVISOR, OR SAFETY DEPARTMENT TO IDENTIFY ADDITIONAL ANCHOR POINTS. IN THE EVENT OF AN EDGE FALL, THE LANYARD OR LKIFELINE MAY ARREST OVER THE EDGE; HOWEVER, SHALLOW ANCHORAGE ANGLES OR THE PRESENCE OF SLACK, LOOPS, OR LOOSE MATERIALS IN THE LINE MAY INCREASE SWING-FALL EXPOSURE OR PERMIT EXCESSIVE FREE-FALL, LEADING TO SERIOUS INJURY OR DEATH.



# SNAP ON SAFETY ANCHOR (SOS) INSTALLATION MANUAL

**Tools Needed For Installation:**

- Torque wrench (ft.lbs)
- ¾ inch long neck socket

**If Inspection reveals any damage, deformation, missing parts, corrosion, or other condition(s) which may impact the devices safe use, the device shall be immediately removed from service and returned to Metal Plus.**

**1.)** When opening the package, you should find three bolts, three washers, three lock washers, three hex nuts, and three sticker labels adhered to the SOS Anchor. Additionally, inspect the bottom of the SOS Anchor jaws: one side should be smooth and vertical (female) and the other should have a hooked profile (male). Verify that the jaws are not identical. Refer to Diagram A for clarification.

**2.)** On the (SOS) Anchor there are three square recessed holes. Install your three bolts through those holes. See diagram B.

**3.)** On the opposite side install the washers, then the locking washers, and last the hex nuts. See diagram C.

**4.)** Leaving the hex nut loosened only until it is flush with the end of the bolt allows the SOS Anchor to open while ensuring the nut remains in place. The hinge system is designed to prevent removal or loss of components. See Diagram C.

**5.)** Before installing the SOS Anchor the roof area must be free of defects, dirt, debris, oil, grease, structural damage, fire damage, corrosion, snow and ice, and any sharp objects. The SOS anchor may only be used on compatible standing seam in serviceable condition as determined by a competent person. When installing the (SOS) on a standing seam metal roof, Metal Plus recommends positioning the device at least six (6) feet from the roof perimeter in all directions to reduce exposure to edge or fall hazards during installation and use. Final determination of anchor placement, free-fall clearance, and total fall distance requirements shall be made by the employer's Qualified Person. Also, the roof panels shall be at least (12ft.) long, when bolting down the (SOS) anchor.

**6.)** Install the (SOS) anchor over the standing seam, and bring the jaw of the anchor, as close to the bottom of the seam as possible. Make sure that the male side of the anchor with the hook grabs underneath the female seam where you see a small counter sink groove, and make sure the panel is either a 24- or 22- gauge steel standing seam. See diagrams D1 and D2.

**7.)** Using a torque wrench with a long-neck ¾" socket, tighten all three hex nuts to 50 ft-lbs. After completing the initial torque sequence, repeat the process to ensure all nuts still meet the required 50 ft-lbs. As the anchor compresses onto the standing seam, torque on the remaining bolts may decrease and must be re-verified. See diagram E.

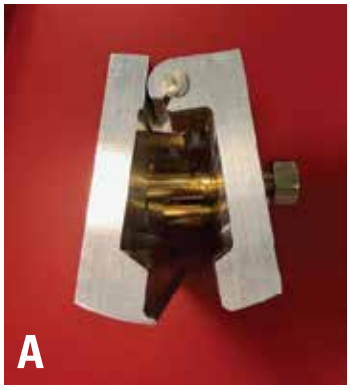
**8.)** A full-body harness and a compatible personal fall-protection system, such as a lifeline or lanyard equipped with an energy-absorbing device, shall always be used in conjunction with the SOS Anchor.

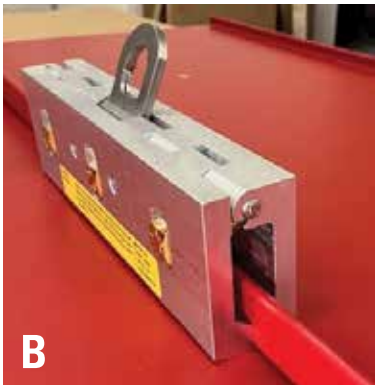
**9.)** The Metal Plus, LLC SOS Anchor is designed and tested to meet the applicable requirements of OSHA 1910.140. When installed in accordance with manufacturer instructions, and when the anchorage and supporting structure are evaluated and approved by a Qualified Person, the SOS Anchor may be used as part of a fall arrest system intended to comply with OSHA 1926.502(d)(1). Metal Plus does not determine or certify the suitability of any specific roof structure for use as a construction anchorage.

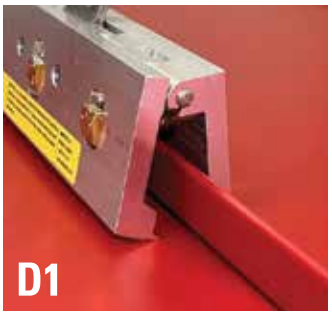
**10.)** Once the SOS Anchor is used and removed from the standing seam metal roof, small dents, scratches or dimples are not the responsibility of Metal Plus, LLC.

**When the Metal Plus Swivel Bar is used in conjunction with this anchor, installation and use shall be performed in accordance with the applicable sections of the Metal Plus Swivel Bar Installation Manual, in addition to all requirements specified in this anchor's installation and instruction manual.**

**Disclaimer: Information contained in this manual does not supersede applicable federal, state/provincial or local regulations. Users are responsible for ensuring that current and authoritative regulatory practices are implemented at the time of use.**





Reproduction of Device Labels

**DO NOT REMOVE THESE LABELS FROM DEVICE**

If Labels below are removed they must be replaced immediately by contacting Metal Plus, LLC 860-379-1327. Refer to page 4, for label placement.

**WARNING!** Failure to follow manufacture's instructions can result in injury or death. All users must read the instruction manual prior to using the snap on safety anchor.

Competent Person must inspect the SOS Anchor prior to each use. A detailed safety inspection must be completed every three months by a qualified person and must be dated and signed.

Date _____ Inspected by _____

Date _____ Inspected by _____

Date _____ Inspected by _____

Meets the anchorage strength requirements of OSHA 1910.140 and 29 CFR 1926.502(d)(1) when installed and used in accordance with Metal Plus instructions.

Independently tested by an accredited third-party laboratory in accordance with OSHA 1910.140.

Dynamic strength testing performed on standing-seam roof panels.

Test documentation available at www.metalplusllc.com or by request.

U.S. Patent No. 10,487,511 B2 www.metalplusllc.com | 1-860-379-1327

## Inspection Log

**User MUST inspect prior to each use. A Competent Person other than the user must complete formal inspection at least every (3) months.**
***A Competent Person Inspect, and initial.***

Date Of First Use: _____

Product must be inspected and pass pre-use inspections by a Competent Person.

This inspection log must be specific to one Snap on Safety Anchor (SOS).

| Year | Jan | Feb | Mar | Apr | May | June | July | Aug | Sept | Oct | Nov | Dec |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Year | | | | | | | | | | | | |
| Year | | | | | | | | | | | | |
| Year | | | | | | | | | | | | |

**If equipment fails inspection IMMEDIATELY REMOVE FROM SERVICE!**

## WARRANTY

All material and products are warranted to be free from defects in materials, workmanship, and assembly (insofar as the products were preassembled, and to exclude the onsite assembly done by others) for one year from the date of purchase, and warranted to be compliant with generally accepted safety and health practices and OSHA regulations and interpretations in force as the day of supply - when properly installed and used by trained and authorized personnel under the employer designated Qualified Person and Competent Person. User is advised that notices on the unit or instructions about dates or lengths of service, or for taking unit out of service are guidelines, are not any guarantee of any life expectancy or expiration date. Normal wear is expected and directly relates to the conditions, frequency, and care of use. All components must be regularly inspected and immediately removed from service if any wear, damage, or degradation could compromise safe function. NOTE: Warranty does not cover wear and tear from heavy or normal use, misuse, accidents, chemical exposure, sunlight, welding or other UV damage, environment, or any other job condition or user imposed treatment. Buyer's/User's sole remedy for the Warranty is for the user/buyer to return the goods for the price paid, or for replacement with like material and product, in new condition. Do not return any good without authorization. NOTE: This is a limited warranty , insofar as the condition of use, the purposes for use, the environmental materials as part of the installation, the use of non-supplied components as part of a complete fall arrest system for the individual users, the qualifications and actions or Supervision of a Competent or Qualified Persons at a particular jobsite, and the personnel training for various employees of various employers that may have access to the product, among other variables, are all completely out of the hands of the manufacturer and supplier, therefore there cannot be there is not any further guarantee or warranty for the fitness of duty, fitness for purpose, fitness for any intended use, adequacy of instructions or warnings, merchantability, or any other warranty or guarantee of any kind or nature whatsoever. Metal Plus, LLC does not warrant regulatory compliance or suitability for any particular use or environment, as these factors are controlled solely by the purchaser. This warranty gives you specific legal rights. You may have additional legal rights in your state. IN NO CASE WILL METAL PLUS, LLC BE LIABLE TO ANY PERSON OR ENITY FOR PROPERTY DAMAGE OR PERSONAL IN TORT (INCLUDING NEGLIGENCE AND STRICT LIABILITY), CONTRACT, WARRANTY,OR OTHERWISE FOR DIRECT, INDIRECT,SPECIAL, INCIDENTAL, PUNITIVE, CONSEQUENTIAL, OR OTHER DAMAGES OR LOSSES, REGARDLESS OF THE CAUSE OF SUCH DAMAGES OR LOSSES , INCLUDED BUT NOT LIMITED TO DAMAGE OF LOSS OF BUSINESS OR ITS CONTENTS OF ANY OTHER LOSS, REGARDLESS OF THE CAUSE OF SUCH DAMAGE AND WHETHER OR NOT CAUSED BY OR RESULTING FROM THE NEGLIGENCE OF METAL PLUS, LCC EVEN IF METAL PLUS, LLC HAS BEEN ADVISED OF THE POSSILBILITY OF SUCH DAMAGES OR LOSSES. METAL PLUS, LLC'S TOTAL LIABILITY FOR ALL CLAIMS OF ANY KIND WILL NOT EXCEED THE PURCHASE PRICE PAID TO METAL PLUS, LLC FOR THE PRODUCT IN QUESTION.

# Optional: Metal Plus Swivel Bar

Metal Plus developed the Swivel Bar to address a common industry challenge: many standing-seam roof anchors on the market claim compatibility with a wide range of panel profiles, including mechanical seam and snap-lock systems. Drawing on decades of experience in metal roofing and anchorage systems, Metal Plus designed the Swivel Bar to provide a controlled, engineered method of linking two Snap-On Safety Anchors (SOS).

The Swivel Bar is load-rated for use only with identical SOS anchors and is not approved for mixed-model or non-Metal Plus configurations. When installed in accordance with manufacturer instructions across adjacent standing-seam panels, the system is designed to distribute load between the paired anchors, subject to the limitations of the roof structure. Use of the Swivel Bar with mismatched anchors, modified components, or non-Metal Plus products is strictly prohibited and voids all ratings, certifications, and warranties. Final determination of suitability for any specific roof, panel profile, and anchorage configuration must be made by the employer's designated Qualified Person, Competent Person, or Authorized Person in accordance with OSHA, ANSI, and other applicable regulatory requirements.

The Swivel Bar adjusts continuously from 21 ¼ inches down to 10¾ inches, allowing it to fit a wide range of standing seam panel widths within those limits. The example below shows the Swivel Bar connected to an SOS Anchor on both sides. The Swivel Bar shall only be used to connect two anchors of the same model type, as shown. Use with mixed or non-matching model types is strictly prohibited.

As with all Metal Plus equipment, the Swivel Bar must be used only as intended and only by personnel who are trained and authorized by their employer. The employer's Qualified Person is responsible for evaluating the roof deck, panel type, anchor location, load path, and overall system suitability prior to installation or use.

Swivel Bar Configuration 1

Swivel Bar Configuration 2

Address:
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214 WALLENS HILL RD
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e-mail: sales@metalplusllc.com