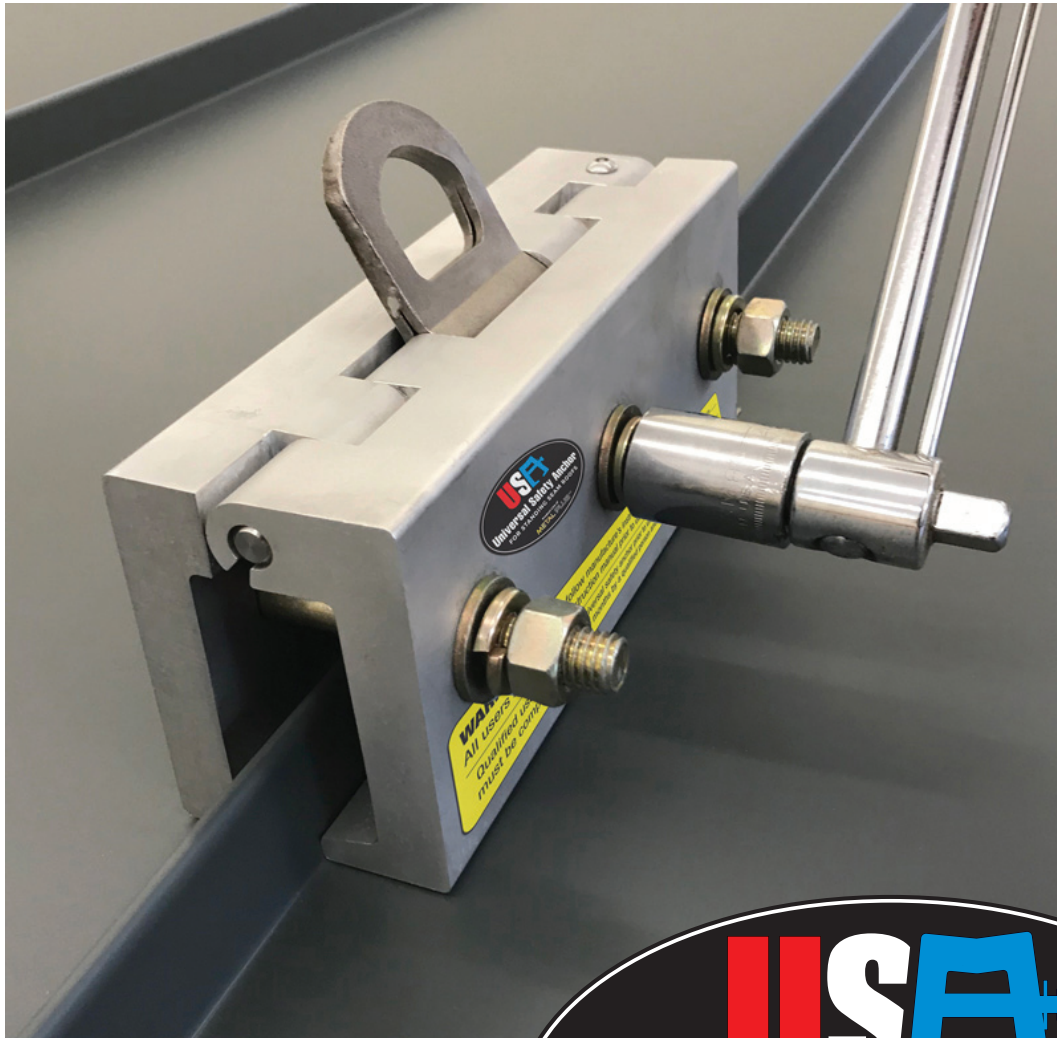


# Universal Safety Anchor



**Compliant with OSHA 1910.140**

Visit our website to view the test results of ANSI Z359.18-2017 and get a detailed analysis of our Universal Safety Anchor performance.



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# OPERATION & INSTRUCTION MANUAL

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Thank you for purchasing our Universal Safety Anchor (USA).

Do not discard these instructions.

All persons using this device must first read and fully understand all warnings, instructions, and regulation 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 Universal Safety Anchor (USA). 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 Universal Safety Anchor (USA) is designed to be attached to standing seam metal roof panels only. When properly used the (USA) will arrest falls and can be used as a single seam/single user, or as part of a component system. The Universal Safety Anchor is designed on a hinge system consisting of: two (8") aluminum extrusions secured together with a single (3/8) stainless steel hinge pin, (3) bolts, (3) washers and (3) locking washers and (3) hex nuts. In the top center of the (USA) is a single stainless steel D-ring compliant with OSHA / ANSI (American National Safety Institute).

The device is designed to be used for residential and commercial applications for fall arrest or restraint. Personal Fall Arrest System (PFAS) guidelines require that a full body harness be worn when using this device. The PFAS must be able to arrest a worker's fall with a maximum arresting force of (1,800 lbs) and a maximum allowable free fall of (6'). An inline **shock absorber** must be used as part of the PFAS in order to minimize the impact on the worker in case of a fall.

## APPLICABLE SAFETY STANDARDS

### Definitions:

**Qualified Person** – 2.109-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 standard. This person is highly trained in fall protection that actually designs and creates systems .

**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. This is someone that performs on-site monitoring of fall hazards.

Program Administrator - 2.107-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 Universal Safety Anchor is the ultimate responsibility of a **Qualified or 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 Universal Safety Anchor (USA) while utilizing an OSHA compliant fall protection plan.

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

A **Competent person** is responsible for determining a safe

workplace environment with regards to job site hazards. Chemicals, oil/grease, structural damage, electrical shock hazards, sharp hazards, weather conditions should all be evaluated as part of a safe OSHA approved safety plan.

A **competent person** is responsible for determining the proper anchoring and installation location of the Universal Safety Anchor (USA) and connected components. Fall hazards, forces applied to anchors, and swing points should be carefully assessed. **The Universal Safety Anchor (USA) should be installed under the direct supervision of a competent person to assure all OSHA, federal, state, and local regulations are followed.**

The Universal Safety Anchor (USA) 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. Due to the nature of working on metal roofs, "Leading edge/Sharp edge" rated steel cable lifelines should be used within 6 feet of the roofs edge to reduce the risk of line abrasions during a fall. Ropes are not "Leading edge/Sharp edge" rated and may result in serious injury or death if allowed to contact panel edge during a fall.

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 Universal Safety Anchor (USA). 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.**

A user should be medically cleared to operate this equipment in a normal, and emergency situations, both physically and mentally.

**These instructions must be maintained for reference and for documenting the inspections.**

## MAINTENANCE AND STORAGE

Any Universal Safety Anchor (USA) 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 Universal Safety Anchor (USA) 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.met-alplusllc.com](http://www.met-alplusllc.com).

The Universal Safety Anchor (USA) is constructed of corrosion resistant materials but it must be kept free of chemical, paint, grease, dirt and oil contamination. It is advised that the device be cleaned with soap and water and wiped dry before and after each use. Avoid storing in areas with excessive moisture, heat, light or chemicals.

## INSPECTION

Prior to each use, a **competent person and authorized person** must inspect the Universal Safety Anchor (USA) 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 a **Competent Person** to determine that the project-specific standing seam mounting location is compatible with the Universal Safety Anchor (USA). The structural capabilities of the seam are to be assessed by a **Competent Person** to determine it is capable to withstanding a fall arrest impact to the Universal Safety Anchor (USA). Never use the Universal Safety Anchor (USA) on a seam that is not compatible or is not in structurally sound condition. However, it is the responsibility of a **Competent Person** to determine the structural integrity of the standing seams.

The Universal Safety Anchor (USA) is to be inspected at least every (3) months by a **Competent Person** and logged on device inspection chart and manual

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

## PRODUCT SPECIFIC APPLICATIONS

Personal fall protection arrest: Universal Safety Anchor (USA) 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 Universal safety Anchor (USA). Maximum allowable free fall is (6ft.) when using the supplied D-Ring. Maximum allowable roof pitch in fall arrest is 12/12.

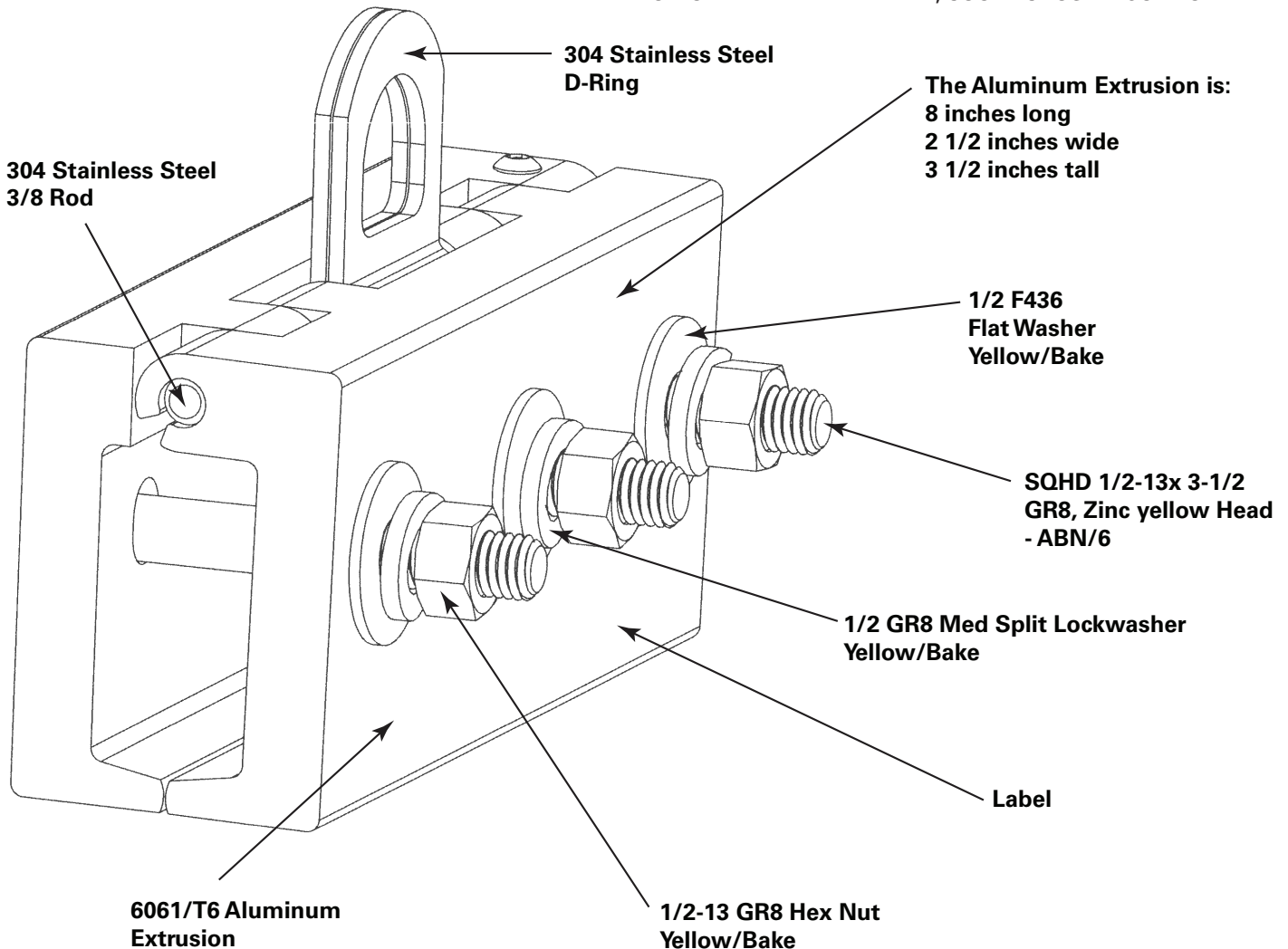
Restraint: Universal Safety Anchor (USA) may be used as a worker restraint device with a 1,000 lbs. impact load on the attachment point. No free fall allowed. Roof pitch is limited to 4/12 maximum.

**UNDER NO CIRCUMSTANCES IS THE MAXIMUM WORKER WEIGHT INCLUDING TOOLS 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).

CONSULT A COMPETENT PERSON, SUPERVISOR, OR SAFETY DEPARTMENT TO GET ADDITIONAL ANCHOR POINTS MOUNTED NEARER TO YOUR WORK. WHEN YOU APPROACH AN EDGE AND FALL, THE LIFE LINE OR LANYARD WILL LIKELY STOP ON THE EDGE. HOWEVER, IF THERE IS TOO SHALLOW AN ANGLE OR LOOPS OR LOOSE MATERIAL IN YOUR LIFELINE, THEN THE SWINGING ACTION OR EXTREME FREE FALL, COULD CAUSE INJURY OR DEATH.





# UNIVERSAL SAFETY ANCHOR (USA) INSTALLATION MANUAL

## Tools Needed For Installation:

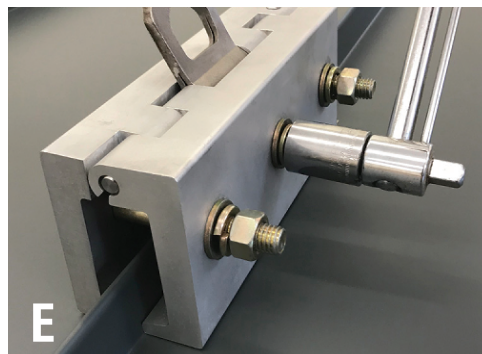
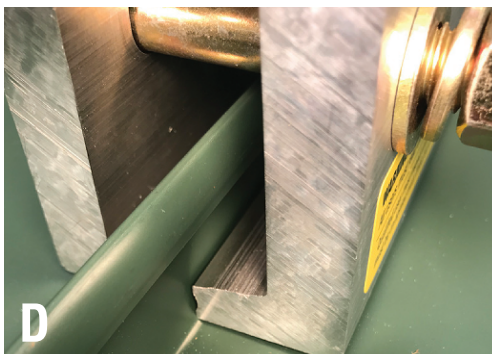
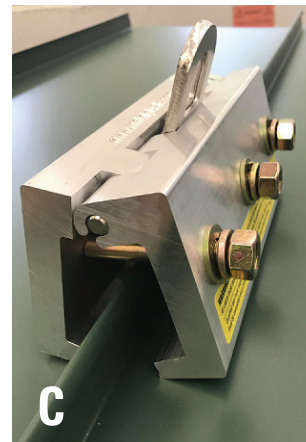
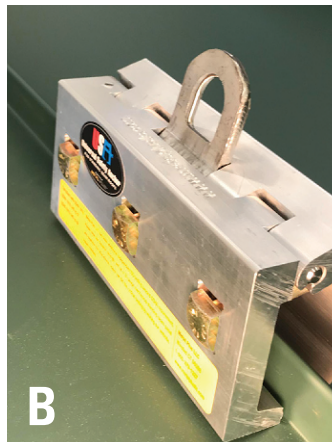
- Torque wrench (ft.lbs)
- ¾ inch long neck socket

**First examine the Universal Safety Anchor (USA) for any defects, if anything questionable is seen send the (USA) back to the manufacturer and do not use.**

- 1.) When opening the package, you should have; three bolts, three washers, three locking washers, three hex nuts, and three stickers labels adhered to the (USA) anchor. Also on the bottom of the jaws of the universal safety anchor one side is a convex and the other side is a concave or you can say female and male verify that they are not both the same. See diagram A.
- 2.) On the (USA) Anchor there are three square recessed holes. Install your three bolts through those holes. See diagram B.
- 3.) On the opposite side install your washers then, your locking washers, and last your hex nuts. See diagram C.
- 4.) Leaving the hex nut unscrewed all the way flush to the tip of the bolt, you will be able to open the (USA) Anchor, without removing the hex nut. The purpose of designing the (USA) anchor on a hinge system was to prevent any removal of parts. See diagram C.
- 5.) Before installing the universal safety 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 universal safety anchor may only be used on compatible standing seam in serviceable condition as determined by a competent person. When installing the (USA) anchor on a standing seam metal roof, make sure you are at least (6ft.) in from the

perimeter of the roof in all directions. Also, the roof panels have to be at least (12ft.) long, when bolting down the (USA) anchor.

- 6.) Install the (USA) 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 jaw is hooked underneath the single or double lock mechanical seam, and make sure the panel is either a 24 or 22 gauge steel standing seam. See diagram D.
- 7.) Using a torque wrench with a long neck ¾ socket tighten all three hex nuts to 70 ft- lbs. torque, and repeat again to be sure the torque is 70 ft- lbs. The purpose to repeat and double check torque is because it is possible, that the anchor will begin to compress into the standing seam, and the other bolts may not be at 70 ft- lbs. torque. See diagram E.
- 8.) A life line or safety lanyard with a deceleration shock absorber, and body harness always has to be used in conjunction with the Universal Safety Anchor (USA).
- 9.) The Metal Plus, LLC Universal Safety Anchor (USA) meets OSHA 1926.502 (d) (2) (3) (4) (15) and OSHA 1910.140
- 10.) Once the Universal Anchor (USA) is used and removed from the standing seam metal roof, small dents, scratches or dimples are not the responsibility of Metal Plus, LLC.



# OPERATION & INSTRUCTION MANUAL

## 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 5, Band C photos for 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 universal safety anchor.

Qualified user must inspect universal safety anchor prior to 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 \_\_\_\_\_

Compliant with OSHA 1900.140	Metal Plus LLC has done additional independent ISO testing beyond OSHA requirement. Please view our dynamic strength test on a 24 gauge mechanical standing seam panel and examine the educational reason we did this critical testing by visiting our website. Patent: U.S. Patent No. 10,487,511 B2	<b>Metal Plus LLC</b> Winsted CT 06098 1-860-379-1327 www.metalplusllc.com
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## 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 Universal Safety Anchor (USA).

Year	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
Year												
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 used by fully trained craftsmen under the supervision of a Qualified Person and a Competent Person who is their supervisor.** 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. The wearing out of a safety product is expected and relation to the kind of use and care it receives during its useful life. **NOTE:** Warranty does not cover wear and tear from heavy or normal use ,abuse 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 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 intened use, adequacy of instructions or warnings, merchantability, or any other warranty or guarantee of any kind or nature whatsoever. 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 POSSIBILITY 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.**

METAL PLUS, LLC, 214 WALLENS HILL RD., WINSTED, CT 06098 • 860-379-1327  
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