









## Two-Way Universal Standing Seam Roof Clamp™

Patents pending

One anchor fits most brands and styles of standing seam.

Unique, reversible design allows for seams up to 1" wide. This is a PSP exclusive! Now a \*MR-24® (or equivalent) AND a \*VSR® (or equivalent) profile can be covered in one or two easy steps!

Anchor securely without penetration or damage to the completed roof.

Use with retractable lanyards, rope and rope grab, or traditional lanyards (for one person).

\*\*Do not use with horizontal lifelines. Designed for a single point tie off anchor only.

Save 60-80% over the cost two clamps by purchasing only one Two-Way Universal Standing Seam Roof Clamp $^{\text{TM}}$ .

New design provides versatility. Enjoy the convenience of always having the size needed from one job to the next without the added cost of two different clamps.

Reusable and easy to use.

Compact size for easy storage.

Lightweight machined steel for easy movement by men on the job.

The durable all steel construction and zinc electroplate finish of the Two-Way Universal Standing Seam Roof Clamp™ resists weather rust — lasts for years with proper care.

Use on clips anywhere on the completely seamed and attached roof sections, not closer than 4 ft. from the edge.

\*\*A qualified and competent person must be involved in design, use, maintenance, and installation of any horizontal lifelines.

\*PSP is not affiliated with Butler Manufacturing. The use of these examples is a point of reference for comparision only.

Note: MR-24® and VSR® are descriptive styles sold by Butler Manufacturing and are standards in the industry.

ITEM NUMBER

340SSRC-03

TWO-WAY

### **System Components**

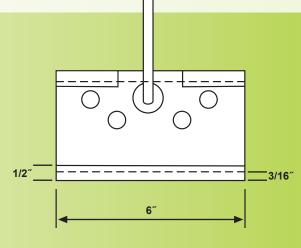
> > for the Two-Way Universal Standing Seam Clamp™

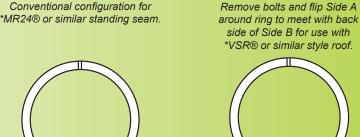
### SAFETY FIRST

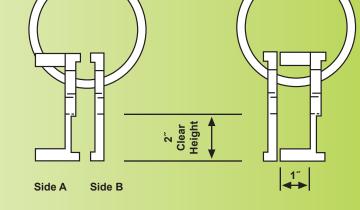
WARNING: FAILURE TO INSTALL, USE AND/OR REMOVE PREFERRED SAFETY EQUIPMENT IN A SAFE AND WORKMAN LIKE MANNER CAN RESULT IN SERIOUS INJURY OR DEATH.

- 1. Read and understand all instructions, warnings, cautions, notes, etc., regarding the safe use of Preferred Safety products.
- 2. When installing, using, and removing Preferred Safety equipment, Federal, State, and Local laws and regulations must be followed.
- 3. Preferred Safety equipment is designed and tested as a system. Never use of mix components that have not been designed and tested for use with this system. Contact Preferred Safety directly if you are unsure.
- 4. Install and remove Preferred Safety equipment in a safe and workmanlike manner. Means of safe installation and removal may include, but are not limited to:
  - Roof Ladders
- Man Baskets
- Lifeline Systems
   Hoist/Lifts
- 5. Each application will be different. You must plan for and follow safe work practices and train workers on job specific safety plans for each installation and removal of Preferred Safety equipment.
- 6. Always use the proper safety equipment when installing, using, or removing Preferred Safety equipment. This may include safety glasses, hearing protection, independent fall protection, etc.

WARNING: OSHA, FEDERAL, STATE, AND LOCAL STANDARDS MUST BE FOLLOWED AT ALL TIMES. FAILURE TO FOLLOW CAN RESULT IN SERIOUS INJURY OR DEATH. SEE COMPLETE MANUFACTURER'S INSTRUCTIONS INCLUDED WITH EACH UNIT.











#### **Note and Warning:**

Preferred Safety reserves the right to change and improve specifications design configurations, components and details at any time without notice. Check with Preferred Safety for any newer versions of products or instructions or warnings during the life of your product. The product is developed in accordance with OSHA and ANSI standards in effect at the time of manufacturing. Users should remain aware of any changes in Safety and Health Laws or Standards in the Jurisdiction in which the user is operating and using Preferred Safety products.

Copyright ©2010 - Preferred Safety Products, Inc. All rights reserved. No copying or distribution of these materials are allowed for any purpose except for sales and management uses of our customers on jobs using the system described herein.

### 340SSRC-00, 340SSRC-03

### PRODUCT SPECIFICATIONS

MAXIMUM CAPACITY IS ONE PERSON PER ANCHOR, MAXIMUM 310 LBS. WHEN USED FOR PERSONAL FALL ARREST OR RESTRAINT. 5,000 LBS. [MEETS OR EXCEEDS ALL APPLICABLE OSHA AND ANSI Z359.1 - 1992 AND ANSI A10.32 - 2005 REQUIREMENTS FOR ANCHORAGE DEVICES.]

### WARRANTY

All material and products supplied are warranted to be free from defects in materials, workmanship, and assembly (insofar as the products were preassembled, and to exclude the on site assembly done by others) for one year from the date of purchase, and are warranted to be compliant with generally accepted safety and health practices and OSHA regulations and interpretations in force as of 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 is in 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/Users' 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 products, in new condition. Do not return any goods without authorization. NOTE: This is a limited warranty, insofar as the conditions of use, the purposes for use, the environmental conditions, the handling, installation, and assembly of a system by others, the use of non supplied 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 of supervision and competent qualified persons at a paticular jobsite, and the personnel training for the 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 and there is not any further guarantee or warranty for the fitness for duty, fitness for purpose, fitness for any intended use, adequacy of instructions or warnings, merchantability, or any other warranty or quarantee of any kind or nature whatsoever. This warranty gives you specific legal rights. You may have additional legal rights in your state.



Preferred Safety Products, Inc.

Preferred for Quality & Practicality<sup>TM</sup> Select Safety Products<sup>TM</sup> Preferred by Craftsmen & Employers<sup>TM</sup> 4785 Elati Street, Suite 15 Denver, CO 80216

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## PSP

## Preferred Safety Products, Inc.

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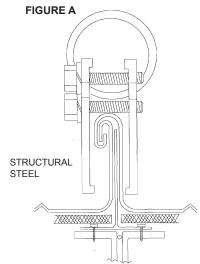
# Standing Seam Roof Clamp™ Installation, Operation and Maintenance Instruction FOR INDIVIDUAL USE ON STANDING SEAM ROOF

This document serves as the Manufacturer's Instructions, and is to be used as part of an employee training program for the system, as required by OSHA.

**Warning:** This product serves as part of a fall protection system. All users must read, understand, and follow the manufacturer's instructions for each and every component of the system. Failure to do so may result in serious injury or death. Do not use unless properly trained. It is the employer's responsibility to ensure that all users are properly trained in proper use, inspection, and maintenance of fall protection equipment. If you have any questions concerning the application, installation, use, or maintenance of this product, please contact Preferred Safety Products.

### **GENERAL INFORMATION:**

- The clamp is designed for use on a standing seam roof. Model 340SSRC-00 is for use on Butler MR24® or equivalent seams and 340SSRC-03 is for all seams including larger Butler VSR® or equivalent.
- The clamp <u>must</u> be attached to a <u>fully seamed</u> <u>panel</u> and <u>must</u> be attached over a clip that is bolted/screwed down (generally to purlins). (See Figure A).
- The flange of the clamp must be hooked under the seam before the four bolts are tightened to a torque of 50 ft./lb. First, tighten the top two to snug, and then the lower two to snug; then tighten the top two to 50 ft./lb., and then the lower two to 50 ft./lb.
- The clamp should be positioned a minimum of four feet from the eave or any unprotected edge.
- A safety lanyard, of a maximum length six foot length, with a deceleration (shock absorber) device and full body harness should be used with the clamp.
- The clamp has been tested to meet and exceed the following OSHA standards: 1926.502(d)(2), (3), (4), and (15): Anchorages for attachments of personal fall arrest equipment.



### SAFETY FIRST:

- 1. Read and understand all instructions, warnings, notes, cautions, etc., regarding the safe use of safety equipment.
- When installing, using, and removing equipment, Federal, State, Local Laws and regulations must be followed. These include, but are not limited to: OSHA, ANSI, and the U.S. Army Corps of Engineers. This includes using a second means of fall protection until the anchor point being installed is ready to use.
- 3. Only for use with compatible equipment as determined by your competent person.
- 4. Install and remove equipment in a safe and workmanlike manner. Means of safe installation and removal may include, but are not limited to:

Roof Ladders

· Lifelines Systems

Man Baskets

Hoist/Lifts

Failure to inspect, install, use, and/or remove equipment in a safe manner by skilled and trained craftsmen can result in serious injury or death. Until the Standing Seam Roof Clamp™ is properly installed, use alternate fall protection means. Contact Preferred Safety Products at 800.301.3188 with any questions on proper installation. The flange of the clamp must be hooked under the seam before the four bolts are tightened to a torque of 50 ft./lb.

- 5. The flange of the clamp must be hooked under the seam before the four bolts are tightened to a torque of 50 ft./lb. First, tighten the top two to snug, and then the lower two to snug; then tighten the top two to 50 ft./lb., and then the lower two to 50 ft./lb.
- The clamp should be positioned a minimum of four feet from the eave or unprotected edge.
- Once the clamp is hooked under the seam, over a clip that is fastened down, tighten the four bolts to a torque of 50 ft./lb. as specified in #5 above.
- 8. The Standing Seam Roof Clamp™ allows for a worker to wear a personal fall arrest system that limits free fall to less than 6 feet and fall forces to less than 1800 lbs. Users must preferably wear a full body harness and shock absorbing lanyard designed to reduce fall forces to 900 lbs. or less, or an equivalent, such as a retractor, rope grab or cable grab system, or other fall arrest system.
- 9. Each application will be different. You must plan for and follow safe work practices for each installation and removal of safety equipment.
- 10. This device does not guarantee your safety; we do not guarantee that no injury will occur if a person falls while working with this unit. Use of this device is only expected to reduce the likelihood of serious injury and limit the fall distance if a fall occurs. Other means should be considered by workers and supervisors to limit the likelihood of a fall as well.
- 11. Once a worker has fallen, the employer must have a plan and a method to rescue him, and give treatment for any injury he sustained in the fall.

- 12. Always use the proper safety equipment when installing, using, or removing equipment. This safety equipment can include gloves, safety glasses, hearing protection, other independent fall protection, etc.
- 13. Note: Some roof material can be scratched or dimpled/dented/bent by use of this device, especially, if workers pull or push on their anchorages, are rough in placement/removal of same, or during a fall arrest. Generally, this is preferrable to fall exposures. However, user is responsible for making the choice to use this method on the buildings/roofs and repairing marks, scratches, or other 'damage' to roofs.
- 14. Never place anything between jaws of device and the roof sheets. Metal to metal contact is required.
- 15. Any fall protection equipment that is involved in a personnel fall incident or is struck by a weight shall be removed from service immediately and discarded or returned to seller or a qualified repair facility.
- 16. This anchor is intended to be a part of a complete fall arrest system meeting all OSHA requirements that have a safety factor of two. All systems shall be complete fall protection systems that reduce forces on the body to less than 1800 lbs. and carry a safety factor of at least 2.
- 17. The 340SSRC-03 can be reversed for larger (wider/taller profile) seam profiles. Take out all 4 bolts, rotate plates to opposite side of ring and reinstall bolts through one side and into other side with threads. Follow all other instructions for mounting on larger seams. Use the "small side" whenever it fits and large side on wide profile/tall profile seams only.

This information should be kept on file and incorporated into your safety program and employee training. It should also be accessible and reviewed by all competent workers using this device and all qualified trainers that instruct the workers. The clamp should be examined each day and each shift and should not be used if damaged. If subjected to stress or a fall, remove from service and return to seller or a qualified repair facility for inspection or replacement.

## **DANGER**

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

CONSULT WITH YOUR COMPETENT PERSON, SUPERVISOR, OR SAFETY DEPARTMENT TO GET ADDITIONAL ANCHOR POINTS MOUNTED NEARER TO YOUR WORK. WHEN YOU APPROACH AN EDGE AND FALL, THE LIFELINE 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 THE EXTREME FREE FALL COULD CAUSE INJURY OR DEATH.



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## CERTIFICATE of COMPLIANCE

This certifies that the Preferred Safety Products 340 Series Standing Seam Roof Safety Clamp© devices, Including Swivel Mounting Bracket Seam Clamp (for retractable lanyards on standing seams) (two clamp model) and (four clamp model). Standard Seam Clamp, and 2 way - Dual Seam Clamp (Patent Pending), when properly used as directed meets the requirements of OSHA for fall protection as a part of a PFAS (Personal Fall Arrest System) as described in OSHA 29 CFR 1926.500 - 503 (OSHA Construction Standards Subpart M). and meets the requirements of anchorages therein. Further, the Standing Seam Roof Safety Clamp© System meets or exceeds the OSHA requirements for fall protection for Steel Erection as described in OSHA 29 CFR 1926.750 et seq., (OSHA Subpart R). Also the standing seam roof clamp meets the requirements for an anchor point, as described in USCOE EM 385.1.1, ANSI A10.32, and ANSI Z-359 as applicable. Most recent standards apply.

The unit was manufactured and tested to fit a variety of standing seam roofs, (similar to Butler MR-24, or Butler VSR - or equals), with 50 ft. lbs. of torque on the bolts, to 5000 lbs. A 5000 lb. load was suddenly mounted on lifeline end, attached to the Standing Seam Roof Clamp. The load was applied and held for over 20 seconds to the seam and the anchor, both parallel and perpendicular to the seam. No damage to the clamp was discerned. Damage to the roof seam was non existant or very minor, and is to be expected as a consequence of a fall arrest. Damage may include scratches, marking of the surface paint/treatment, creasing, bending, minor tearing or dimples (rarely if ever seen), or deformation or minor buckling or delaminating of the seam or a caulk tape joint, if applicable. It is possible that beneath the roof, hold down clips will be deformed, or disengaged, and forces will be applied thereafter to adjacent clips or a minor humping up of the roof section may be evident - although this has only been referenced in theory and never seen empirically in any fall arrests that have occurred. After a significant fall arrest use alternative anchor points and inspect the roof system and replace any parts that are questionable with new materials. Remove all fall arrest equipment involved in a fall arrest and destroy it or return it to Preferred Safety Products for inspection and potentially re-certification.

The Standing Seam Roof Safety Clamps© (all PSP devices noted above are included in this reference) are rated as an anchor point for one worker with a maximum weight per worker of 310 lbs., with a overall ultimate strength of 5000 lbs. Users should ideally use Preferred Safety Lanyards series 231-234, or Preferred Safety vertical lifelines series 410PLFE, with Preferred Safety Rope Grabs Series 300RGD, or Preferred Safety Cable Lifelines, with Preferred Safety Cable Grabs all of which deliver less than 900 lbs of force during a fall through the lifeline/lanyard to the users' body through his harness, and to the Standing Seam anchor point. In the alternative equivalent devices may be used as determined by the user's/employer's designated competent person for fall protection. It is permissible to use other OSHA compliant lifelines, retractors, and lanyards, that incorporate a shock absorber that reduces the force on the body and the anchor point to no more than 1800 lbs and which meet the requirements of OSHA 29 CFR 1926.500 - 503 (OSHA Construction Standards Subpart M - Appendix C).

The user shall attach the product to a secure, fully installed and structurally intact and finished (except for

flashing and minor finish pieces), two sheet section of a roof system as described, or roof system with equivalent strength/attachments. At least two additional panels one on each side of the two involved in the clamping should be in place and permanently and fully structurally secured as well. Full installed specifically refers to the engagement of the clips into the purlins, and the seams with the clips, and the seams finished with either a crimping device or a seam roller, or other finish methods, if applicable. Some seams are finished when they are fully mechanically engaged (male female locking method). The Standing Seam Roof Safety Clamp© shall be attached over top of a fully attached and secure roof clip - generally over the purlins (insuring that the lip/edge of the clamp plate, fits under the lowest lip of the seam). The seam clamp secures to the roof system through mechanical compression of the two or more roof sheets below the lowest edge of the seam mechanism, with a roof clip sandwiched between the two or more roof sheets. The mechanical compression, the surface tension and resistance, the mechanical attachment of the clip to the purlin, the purlins mechanical attachment to the roof rafters, building frame, and the seam, which is a mechanical closure marrying two pieces of roof sheeting, all combine through the use of the Preferred Safety Products Standing Seam Roof Clamp to resist the forces of a fall arrest transferred through the clamp. Engineering and testing has shown the clamps to be effective on roofs up to 28 Ga. with roof systems that have wind loadings commonly found in the USA, as described in Uniform Building Codes. If the building you are attempting to use a seam clamp on is not UBC rated for wind loads, is some kind of an experimental building system, has a blast relief roof system or other non-typical roof, is not engineered by a reputable manufacturer of system metal buildings, or not engineered at all, do not use the clamp for safety until PSP engineers or consultants are consulted. If there is ever any question about the integrity of a roof two withstand any loads, do not use the PSP Seam clamp. Return the product or call PSP for consultation on alternative methods. If requesting help, a clear section of the roof system must be shown on a drawing or sketch, (roof, purlin, and rafter structural drawings, and architectural sections showing roof attachment, and the specifications for the buildings roof and wind loads must be sent or available. Engineering and consultation may involve additional consultation fees, and are often performed by our Associate company, Cole-Preferred Safety Consulting, Inc. 303-477-0535.

The user shall maintain the system in undamaged condition, and install it under the supervision of a qualified and a competent person, so that the user(s) can achieve 100% fall protection by attaching from one anchorage point to another before disconnecting the from the first anchorage lanyard all the while they are exposed to falling any distance. For access to and from the roof, or work area, users must place additional fall protection and access equipment for safe travel up and down to the area of the standing seam anchor point. Other forms of fall arrest or fall positioning anchor points and equipment may be necessary for all the different tasks and access that a project may have. The use of a full body harness is required, and two lanyards of the shock absorber type (900 lb. fall arrest force) are recommended. The use of this device as a positioning anchorage is possible but not recommended as the tension and frequent movement may cause disfigurement of roof. Fall arrest is accomplished by a combination of the shock absorbency of the worker's lanyards, and flexion and potential deformation of the roof structure and underlying attachments. The user's employer shall provide training on the techniques to be used for that project and the configuration of the installations. A competent and qualified person shall be on site per OSHA and familiar with the instructions that came with the units and this certification, and fall protection guidelines and laws/rules and standards as they apply to his job or project.

Certified this 5th day of December 2009

Preferred Safety, President

Engineering & Design Manager