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G-CLAMPS
NON-INVASIVE FALL PROTECTION SYSTEM

User Instruction/ Safety Manual

! ATTENTION !

- Do not throw away these instructions!
- Instructions must be provided to the user of this product and the user must completely read and understand the proper use and limitations of this system prior to use.
- **If the user has questions about the product assembly, use, care, condition, inspection or suitability of the roof work area, please contact G-CORP immediately.**
- Read and follow all OSHA or local governing agency standards on fall protection prior and during the use of this product.
- Failure to follow instructions may result in serious injury or death.

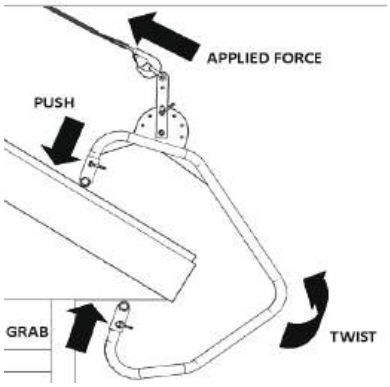
Product Description: The G-Clamps Fall Protection System is a uniquely designed non-invasive fall protection system that utilizes friction instead of nails or screws to secure to a roof. This system is designed for temporary use and is reusable.

On pitched roofs, this product uses a twisting/gripping motion, known as a "Grappling" effect (figure 1) to adhere to the roof. On a flat roof or roof with overhanging parapet walls, this system is designed to "Clamp" around the edges of the roof and use the anchor in the center, with extensions to raise it up, creating a pitched roof effect.

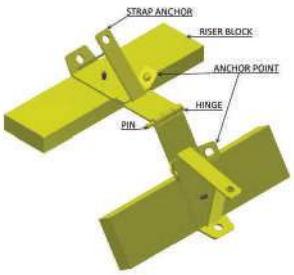
This system includes an anchor at the peak of the roof (figure 2) with two separate G-Clamps (figure 3) wrapped around opposite edges of the roof and connected by ratchet straps that hold constant tension. There are four tie-off points on the center of the anchor, two on each side extending outward. These are the only connecting points safe to tie-off. Never connect your lanyard to the G-Clamp, strap or strap connection points.

This system is designed for two users for fall restraint and one user fall arrest applications. It is required that all parts of the system are properly installed and used together as a whole system. Failure to use the system properly or in it's entirety may result in serious injury or death.

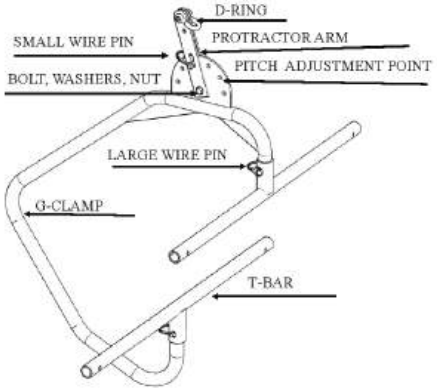
(figure 1)



(figure 2)



(figure 3)



WARNING

- Do not alter or misuse equipment. Do not use any combination of components that may affect the safe function of this system.
- Do not use system around harmful elements that may have a degrading effect on the system including sharp edges, abrasive material, corrosive chemicals or other harmful hazards.
- User is required to have a safety plan prior to use of this system and employer is required to provide a training program to each employee that may encounter a fall hazard.
- User is required to use a shock absorbing lanyard or retractable lifeline with this system

Training Requirements:

- All persons using this system are required to completely read and understand this manual prior to use of the system.
- All persons using this system are required to have complete knowledge of how to set-up/remove system, product limitations/requirements, proper care/maintenance and the risks associated with the failure to completely understand the system or improper use of the system. It is the responsibility of purchaser, trainer and user to document and verify training.
- Training is required periodically to verify that all product users are proficient in all aspects of this system. This manual is not a substitute for a complete training program. It should be used as part of a comprehensive training program as required by OSHA.
- All persons using this system shall be trained in relevant local, State and Federal requirements and standards for fall protection prior to use of the system.

Rescue Plan:

- The user or employer of user must have a rescue plan prior to using this system and the means to implement it on site. A specific plan is required for each project.

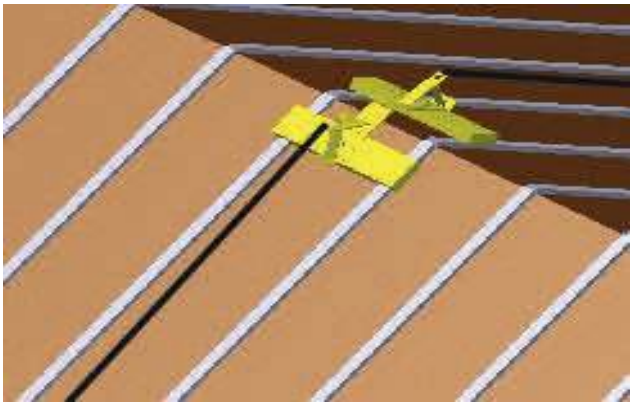
Application: The G-Clamps system can be used in either a fall restraint (2 user) or fall arrest (1 user) application. This system must be connected to a structure capable of withstanding 5,000 lbs. This system is required to be used with a full body harness and shock absorbing lanyard.

- **Fall Restraint:** Product used as a component of a restraint system where no vertical free fall is permitted
- **Fall Arrest:** Product used as a component of a personal fall arrest system limiting free fall distance to 6 ft. Remove system from use immediately in the event a fall occurs.

- **Standing seam or ceramic/clay tile:** Riser blocks with frictions pads are required to prevent damage to roof. Riser blocks are backed with the hook side of Velcro and are to adhere to the loop side Velcro backing of the friction pads. Riser blocks are to be centered and placed properly on roof so that no standing seam or tile will be crushed (Figure 5). Friction pads are to be used every time a riser block is used and must be replaced when they have been compressed to less than 50% thickness.

(Figure 4)

(figure 5)



Inspection: Inspections are required to be preformed by a competent person prior to each use of the system. If the system is left on a structure, it is required to be inspected prior to the start of each work shift. Inspections must be signed , dated and recorded prior to each use. If any part of the system is found to be damaged, remove immediately from use. Never replace missing or damaged parts unless obtained through G-Corp or authorized distributors. Never attempt to service or repair broken or damaged parts.

Work Area: walk the perimeter of the structure to identify the following:

- Anchor point locations. Locations must have the ability to connect all three pieces of the system (two G-Clamps and one anchor) in a straight line over the peak of the roof to two opposite roof edges. Verify the ability to safely reach the working area from the anchorage point. If not, find a different anchorage location. If the work area is more than one specific area on the roof, determine all anchorage point locations that will allow you to access the work area safely and how many times system must be moved and re-installed. Never work above anchorage point.
- Safe way to access roof peak (access roof peak directly on steep slope roofs) and all anchorage locations.
- Roof type/material. Riser blocks and friction pads are required for use on ceramic tile and standing seam metal roofs to prevent damage to roof.
- Roof pitch. Adjust protractor arm according to roof-s pitch. Arm should always remain vertical.
- Rafter width. T-Bars should be centered on rafters. If rafters are wider than 36", pin additional extensions on ends of T-bars to desired length. If soffits are enclosed, center T-bar using the nail holes used to secure soffit covers to rafters.
- Roof and support condition. Never use this system if the roof or supports are rotten or deteriorating. Look for additional signs of structural weakness including but not limited to cracking, corrosion, or chipping. Never use this system on a roof or structure that is not capable of withstanding anticipated loads.
- Roof dimensions. Determine the proper length of straps necessary by measuring the distance between roof peak and bottom of roof edge (gutter line).

G-Clamp and Anchor: inspect for physical damage, debris, corrosive chemicals and missing or improperly secured parts including:

- Deformation or bending.
- Cracks in the protective finish or welds.
- Wire locking pins (4) connecting T-bar to ends of G-Clamps are in place and locked with wire on inside of the system.
- Riser blocks are connected to the anchor securely and are not damaged or dented
- Hinge pin is secured in order to connect the two hinge plates
- Wire locking pin (2) used to adjust pitch is locked in place at correct pitch.
- Bolt and nyloc nut (2) securing pitch-adjustment bar are tighten in place.
- Shackle (2) at end of pitch adjustment bar is completely fastened between both protractor arms.
- Warning, inspection requirement and inspection record labels. Never use this system if these labels are not present, or not completely readable.

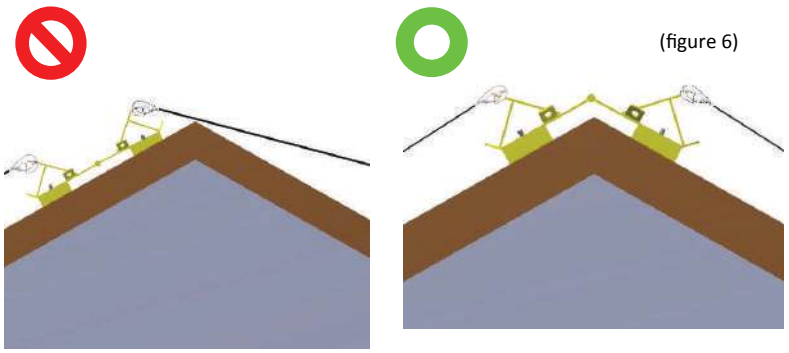
Ratchet and Straps:

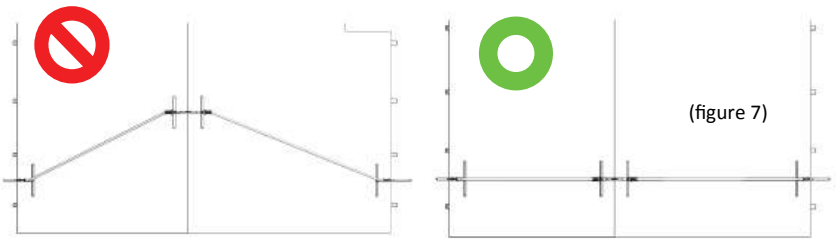
- Verify strap has G-Clamps logo. Never use strap with system that does not have this logo present.
- Strap must be free of foreign materials, corrosive chemicals, fraying, weathering or discoloration in the tell lines.
- Check snap-hooks for cracks, deformation or damage to the self locking mechanism.
- Ratchets must be free or dirt or debris.
- Ratchets must be checked for cracks, deformations or damage to the locking or retracting mechanisms. Make sure it clicks or locks in place when ratcheting tight.

Assembly: The G-Clamps Fall Protection System is designed for easy assembly/disassembly. Both G-Clamps have two t–bars that slide over each end and are held in place by a wire-locking pin. The anchor is made up of five parts, two hinge plates, a hinge pin and two riser blocks, The G-Clamps also have a smaller wire-locking pin that holds the pitch adjustment bars at the correct angle and a screw-lock shackle holding the two bars together while acting as the connecting point for the straps. The wire on the locking pins should always lock on the inside to prevent accidental disconnection. Never use this system if any wire-locking pin or shackle is not present or properly locked in place.

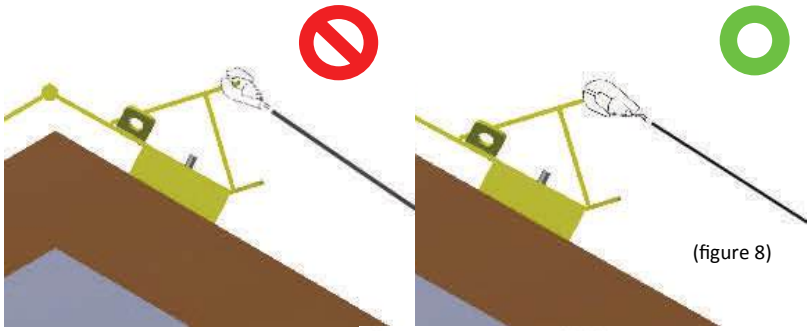
Installation:

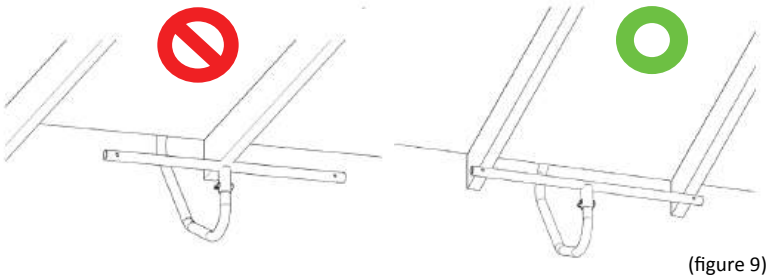
- Inspect the G-Clamps and ridge anchor for missing, deformed or damaged parts and/or cracks in the protective finish. Inspect straps for foreign materials (i.e. chemicals), fraying, weathering or discoloration in tell lines. Inspect ratchets to verify they are free of debris and mechanically working including the locking mechanism. Inspect all connecting points of roof where the G-Clamps or anchor to verify the structural integrity of the building/roof. If there are any questions to whether the system is damaged remove this system from service until it can be inspected by a qualified person. Inspection must be recorded prior to use of this system.


(figure 6)


(figure 7)

- Carry anchor, straps, ratchets to peak of roof. If approaching a roof with a steep pitch with a ladder or lift, approach from the ridge of the roof when physically possible.
- Center anchor over ridge (figure 6). Look to both of the roof's edges to verify that it is possible to connect all 3 parts of the system together in a straight line (figure 7).
- Snap one ratchet hook face down to either side the anchor (2 in total) (figure 8). Open each ratchet and insert strap from underneath. Always make sure the hook face is open down, the G-Clamps logo is on the top side and that there is no twist in the strap. Lower straps to roof's edge.


(figure 8)


(figure 9)

- Place G-Clamp over eave of roof. If placed properly, G-Clamp will wrap around eave without contacting gutter or fascia. T-bar should be centered between two rafters (figure 9). Snap strap hook face down to shackle on pitch adjustment bar. Pitch adjustment bar should always be vertical or leaning slightly away from roof in order to function properly. Pull strap through ratchet until tight. Lock in place. Repeat for opposite side.
- Continue tightening both ratchets simultaneously until there is no movement in either G-Clamp or in the anchor while keeping the anchor centered over the peak of the roof. Close each ratchet and wrap up any additional strap. Over-tightening may result in unwarranted damage to roof. Secure ratchet strap and extra straps in provided cover to prevent trip hazard and accidental release of ratchet.

Removal:

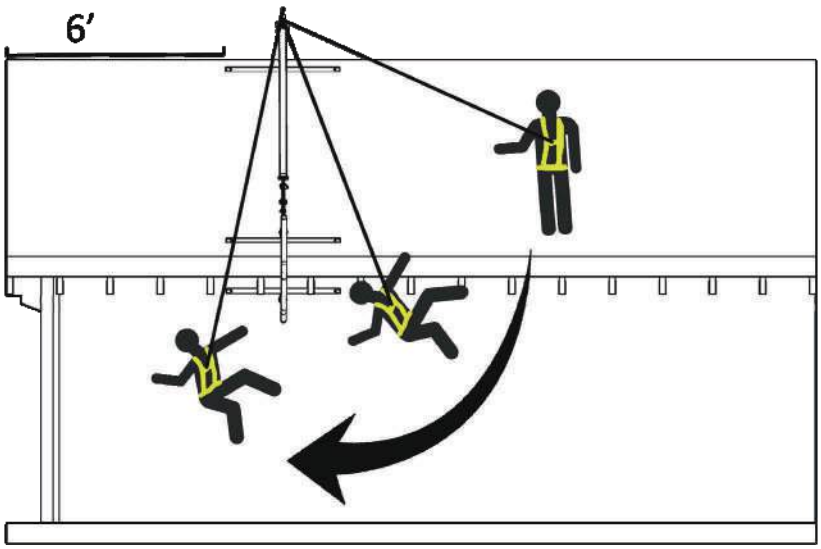
1. With spotter in place below corresponding G-Clamp, straddle roof peak. Open one ratchet. Hold excess strap in one hand and unlock ratchet with the other to release tension on the system.
2. Loosen strap and unsnap hook connecting to the corresponding G-Clamp. Remove G-Clamp from eave by approaching from the ground.
3. Repeat steps 1-2 for other ratchet, strap and G-Clamp.
4. Wrap up straps and ratchets. Carry down along with the anchor.

Storage and Care:

- Repairs or replacement parts must be authorized by G-Corp.
- Clean and dry entire system before and after each use.
- Always store the G-Clamps Fall Protection System in the provided case to prevent unwarranted damage or abrasions.
- Always store this system in a location that cannot be affected by heat, light, moisture, oil, chemicals or other harmful elements.

REMEMBER…

Just because you are tied off does not mean you are completely safe from all hazards. Make sure your rope and lanyard are proper length to limit your fall swing hazard (no more than a 6 ft. free fall). This includes the ground, lower working levels or any other object next to or directly below you. You should never work more than 45° to either side of the anchor. STAY SAFE!



This product complies with OSHA standard 1926.502.

U.S. Patent Number 9,248,323.