

GUARDIAN

FALL PROTECTION



Product Name: G-Rail

Part #: 15178; 15180; 15202; 15181; 15182; 15183; 15184; 15185

Instruction Manual

Do not throw away these instructions!
Read and understand these instructions before using equipment!

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Introduction

Thank you for purchasing a Guardian Fall Protection G-Rail. This manual must be read and understood in its entirety, and used as part of an employee training program as required by OSHA or any applicable state agency.

This and any other included instructions must be made available to the user of the equipment. The user must understand how to safely and effectively use the G-Rail, and all fall safety equipment used in combination with the G-Rail.

User Information	
Date of First Use:	_____
Serial #:	_____
Trainer:	_____
User:	_____

Applicable Safety Standards

When used according to instruction specifications, this product meets or exceeds all applicable OSHA 1926 Subpart M and OSHA 1910 standards for fall protection. Applicable standards and regulations depend on the type of work being done, and also might include state-specific regulations. Consult regulatory agencies for more information on fall protection systems and associated components.

Worker Classifications



Understand the following definitions of those who work near or who may be exposed to fall hazards.

Qualified Person: A person with an accredited degree or certification, and with extensive experience or sufficient professional standing, who is considered proficient in planning and reviewing the conformity of fall protection and rescue systems.

Competent Person: A highly trained and experienced person who is ASSIGNED BY THE EMPLOYER to be responsible for all elements of a fall safety program, including, but not limited to, its regulation, management, and implementation. A person who is proficient in identifying existing and predictable fall hazards, and who has the authority to stop work in order to eliminate hazards.

Authorized Person: A person who is assigned by their employer to work around or be subject to potential or existing fall hazards.

It is the responsibility of a Qualified or Competent person to supervise the job site and ensure all applicable safety regulations are complied with.

Product Specific Applications



WARNING Use of equipment in unintended applications may result in serious injury or death. NEVER make any connections to guardrail systems.



Fall Prevention: G-Rails may be used in Fall Prevention applications ONLY. Fall Prevention Systems are placed around the leading edges of any and all fall hazards to prevent a worker from going over an edge, and may be used in substitute of Fall Protection or safety netting systems. Installation requirements for G-Rails set forth in this manual MUST be adhered to. Personal Fall Arrest, Work Positioning, Climbing, Rescue, and any other systems must NEVER be connected to Fall Prevention Systems.



WARNING NEVER lean or climb on guardrail systems.

Surfaces more than 6' above lower levels require the use of a Fall Prevention or Fall Protection system.

Components and Specifications

Materials: powder-coated steel.

Part #	Length	Description
15181	10'	Guardian Fall Protection G-Rail. Powder-coated yellow.
15182	8'	Guardian Fall Protection G-Rail. Powder-coated yellow.
15183	6'	Guardian Fall Protection G-Rail. Powder-coated yellow.
15202	12'	Guardian Fall Protection G-Rail. Powder-coated yellow.



Baseplates: SOLD SEPARATELY from G-Rail Systems. Baseplate part #s 15178 and 15180 are compatible with G-Rail Systems.

No toeboard attachments required. Use toeboard slots on baseplate for correct toeboard installation.



#15178



#15180

Toeboard attachments required for toeboard installation.

Baseplates and toeboards must be placed perpendicular to guardrails. Short toeboard attachments must be oriented perpendicular to long side of baseplate. Long toeboard attachments must be oriented perpendicular to short side of baseplate.



Installation and Use

Requirements for guardrail systems:

MAXIMUM permitted roof pitch is 1/12 (5°).

Toprails must be 42" (+/- 3") above the work surface or, if used in stilt work applications, 42" plus the height of stilts.

Midrails must be installed halfway between the top edge of the guardrail system and the working level (not the toeboard).

All intermediary rails (not the toprail or the midrail) must not allow for gaps greater than 19".

Toeboards are REQUIRED on roofs of slopes more than 4/12 (vertical/horizontal).

Toeboards are REQUIRED if a risk exists for tools, equipment, materials, or other substances to fall down to a lower level.

Toeboards must be a minimum 3½" from their top edge to the working surface, and must not have greater than ¼" clearance between their bottom edge and the work surface.



Prior to installation, plan your system:

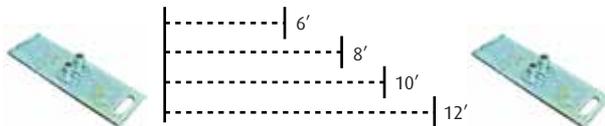
1. G-Rail Systems must be installed in a continuous run, and must completely block all applicable leading edges of fall hazards.
2. Never install G-Rail Systems on top of gravel or other loose or slippery surfaces.
3. G-Rail Systems must be installed a MINIMUM of 10' from power lines and all other electrical hazards.
4. Lay out the job by measuring and spacing the work surface and the selected baseplates. **Baseplates must be at least 24" from the edge of any opening or leading edge hazard.** Failure to properly measure and plan ahead may result in having to disassemble the system and reinstalling. NEVER attempt to move a fully assembled system.
5. Ensure baseplates are oriented correctly. Baseplates must be perpendicular to guardrails (except for outriggers, where one baseplate will run parallel with guardrail). Toeboards must run parallel with guardrails.
6. For all baseplates, loosen set-screws/remove locking pins.
7. ALWAYS use outriggers at BOTH ends of any interruption in continuous guardrail sections, and at BOTH ends of a continuous guardrail section. An outrigger is a guardrail installed perpendicular to a continuous run.

Wind load rating: 70 MPH.

DO NOT USE if potential exists for exposure to wind gusts greater than 70 MPH.

Assembly and use:

1. Place all baseplates around leading edges of fall hazards, spaced at distances corresponding with selected guardrail lengths (6', 8', 10', 12').
2. If using baseplate #15180, install all necessary toeboard attachments onto guardrails. Consider whether short or long toeboard attachments are necessary.
3. Hold guardrail between body and fall hazard. While standing as far away as possible from all fall hazards, position one leg of guardrail into its corresponding baseplate connection point. With guardrail still between body and leading edge, walk forward to position remaining leg into its corresponding baseplate connection point. Repeat process for all guardrails.
4. For all baseplates, tighten set-screws/reinstall locking pins. Ensure guardrails are firmly installed and do not move. Ensure all toeboards will run parallel with guardrails. Insert all 2"x4" toeboards into attachment points.



Maintenance, Cleaning, and Storage

If G-Rail fails inspection in any way, immediately remove it from service, and contact Guardian to inquire about its return or repair.

Cleaning after use is important for maintaining the safety and longevity of G-Rail. Remove all dirt, corrosives, and contaminants from G-Rail before and after each use. If G-Rail cannot be cleaned with plain water, use mild soap and water, then rinse and wipe dry. NEVER clean G-Rail with corrosive substances.

When not in use, store equipment where it will not be affected by heat, light, excessive moisture, chemicals, or other degrading elements.

Inspection

Prior to EACH use, inspect G-Rail for deficiencies, including, but not limited to, corrosion, deformation, pits, burrs, rough surfaces, sharp edges, cracking, rust, paint buildup, excessive heating, alteration, and missing or illegible labels. IMMEDIATELY remove G-Rail from service if defects or damage are found.

Ensure that applicable work area is free of all damage, including, but not limited to, debris, rot, rust, decay, cracking, and hazardous materials. Ensure that selected work area will support the application-specific minimum loads set forth in this instruction manual. Work area MUST be stable.

At least every 6 months, a Competent Person other than the user must inspect G-Rail. **Competent Person inspections MUST be recorded in inspection log in instruction manual and on equipment inspection grid label. The Competent Person must sign their initials in the box corresponding to the month and year the inspection took place.**

During inspection, consider all applications and hazards G-Rail has been subjected to.

Inspection Log

Date of First Use: _____.

Product lifetime is indefinite, as long as it passes pre-use and Competent Person inspections. User must inspect prior to EACH use. Competent Person other than user must complete formal inspection at least every 6 months. Competent Person to inspect and initial. Contact Guardian Fall Protection for a replacement inspection grid label every 5 years product is in service.

This inspection log must be specific to one G-Rail. Separate inspection logs must be used for each G-Rail. All inspection records must be made visible and available to all users at all times.

	J	F	M	A	M	J	J	A	S	O	N	D
YR												
YR												
YR												
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YR												

If equipment fails inspection IMMEDIATELY REMOVE FROM SERVICE.

Safety Information



Failure to understand and comply with safety regulations may result in serious injury or death. Regulations included herein are not all-inclusive, are for reference only, and are not intended to replace a Competent Person's judgment or knowledge of federal or state standards.

Do not alter equipment. Do not misuse equipment.

Workplace conditions, including, but not limited to, flame, corrosive chemicals, electrical shock, sharp objects, machinery, abrasive substances, weather conditions, and uneven surfaces, must be assessed by a Competent Person before fall protection equipment is selected.

The analysis of the workplace must anticipate where workers will be performing their duties, the routes they will take to reach their work, and the potential and existing fall hazards they may be exposed to. Fall protection equipment must be chosen by a Competent Person. Selections must account for all potential hazardous workplace conditions. All fall protection equipment should be purchased new and in an unused condition.

Fall protection systems must be selected and installed under the supervision of a Competent Person, and used in a compliant manner. Fall protection systems must be designed in a manner compliant with all federal, state, and safety regulations. Forces applied to anchors must be calculated by a Competent Person.

Unless explicitly stated otherwise, the maximum allowable free fall distance for lanyards must not exceed 6'. No free fall allowed for non-LE SRLs. Class A SRLs must arrest falls within 24"; Class B SRLs must arrest falls within 54".

Harnesses and connectors selected must be compliant with manufacturer's instructions, and must be of compatible size and configuration. Snap hooks, carabiners, and other connectors must be selected and applied in a compatible fashion. All risk of disengagement must be eliminated. All snap hooks and carabiners must be self-locking and self-closing, and must never be connected to each other.

A pre-planned rescue procedure in the case of a fall is required. The rescue plan must be project-specific. The rescue plan must allow for employees to rescue themselves, or provide an alternative means for their prompt rescue. Store rescue equipment in an easily accessible and clearly marked area.

Training of Authorized Persons to correctly erect, disassemble, inspect, maintain, store, and use equipment must be provided by a Competent Person. Training must include the ability to recognize fall hazards, minimize the likelihood of fall hazards, and the correct use of personal fall arrest systems.

NEVER use fall protection equipment of any kind to hang, lift, support, or hoist tools or equipment, unless explicitly certified for such use.

Equipment subjected to forces of fall arrest must immediately be removed from use.

Age, fitness, and health conditions can seriously affect the worker should a fall occur. Consult a doctor if there is any reason to doubt a user's ability to withstand and safely absorb fall arrest forces or perform set-up of equipment. Pregnant women and minors must not use this equipment.

Physical harm may still occur even if fall safety equipment functions correctly. Sustained post-fall suspension may result in serious injury or death. Use trauma relief straps to reduce the effects of suspension trauma.

Labels





CAUTION

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FALL PROTECTION

Instruction cards MUST ALWAYS remain attached to EACH 6'/8'/10'/12' G-Rail. DO NOT USE if instruction cards are not present. PRIOR TO USE, read and fully understand all instructions included with the equipment at time of shipment from the manufacturer. All users must be fully trained with the instructions for proper use of G-Rail Systems.

User must inspect prior to EACH use. Competent Person must complete formal inspection every 6 months. Competent Person to inspect and initial.

Date of First Use: _____ . **Product lifetime is indefinite as long as equipment passes pre-use and Competent Person inspections.**

INSPECTION GRID	YR	J	F	M	A	M	J	J	A	S	O	N	D
	20												
	20												
	20												
	20												
	20												

If equipment fails inspection
IMMEDIATELY REMOVE FROM SERVICE

DO NOT REMOVE LABEL