

Cross Arm Strap User Instructions



General Safety Information

These *User Instructions* are not to be removed except by the user of this equipment. *User Instructions* must always be available to the user.

WARNING

Compliant fall protection and emergency rescue systems help prevent serious injury during fall arrest. Users must read and understand the *User Instructions* provided with the product and be properly trained by their employer prior to use per OSHA 29 CFR 1910.66 and 1926.503 or applicable local standards. **Misuse or failure to follow warnings and instructions may result in serious personal injury or death.** For proper use, see supervisor, *User Instructions*, or call Technical Service at 1-800-560-1094.

Purpose

The 3M Cross Arm Straps are designed to be used as part of a personal fall arrest system, to help limit the fall arrest forces in the event of a fall.

Use Instructions

1. Failure to follow all instructions and limitations on the use of Cross Arm Straps may result in serious personal injury or death.
2. Before using a personal fall arrest system, employees shall be trained in accordance with the requirements of OSHA 29 CFR 1910.66 in the safe use of the system and its components.
3. Personal fall arrest systems, including Cross Arm Straps, shall be inspected prior to each use for wear, damage, and other deterioration, and defective components must be immediately removed from service, in accordance with the requirements of OSHA 29 CFR 1910.66 and 1926.502.
4. The complete fall protection system must be planned (including all components, calculating fall clearance, and swing fall) before using.
5. Users must have a rescue plan, and the means at hand to implement it, that provides the prompt rescue of employees in the event of a fall, or assures that employees are able to rescue themselves.

6. Store Cross Arm Straps in a cool, dry, clean environment, out of direct sunlight, when not in use.
7. After a fall occurs, the Cross Arm Straps must be removed from service and destroyed immediately.

Use Limitations

1. Cross Arm Straps must only be used on structures capable of supporting static loads applied in all directions permitted by the fall arrest system of at least: 3,600 lbs. (16.0 kN) with certification of a qualified person, or 5,000 lbs. (22.2 kN) without certification.
2. Cross Arm Straps are designed to be used in temperatures ranging from -40°F to +130°F (-40°C to +54°C).
3. Do not expose Cross Arm Straps to chemicals or harsh solutions which may have a harmful effect. Contact 3M Technical Service with any questions.
4. Caution must be taken when using Cross Arm Straps near moving machinery, electrical hazards, sharp edges, or abrasive surfaces, as contact may cause equipment failure, personal injury, or death.
5. Minors, pregnant women and anyone with a history of either back or neck problems should not use this equipment.
6. Do not use or install equipment without proper training from a “competent person”, as defined by OSHA 29 CFR 1926.32(f).
7. Only 3M, or persons or entities authorized in writing by 3M, shall make repairs or alterations to the equipment.

Compatibility Limitations

All 3M Cross Arm Straps must only be coupled to compatible connectors. OSHA 29 CFR 1926.502 prohibits snaphooks from being engaged to certain objects unless two requirements are met: it must be a locking type snaphook, and it must be “designed for” making such a connection. “Designed for” means that the manufacturer of the snaphook specifically designed the snaphook to be used to connect to the equipment in question. The following connections must be avoided, as they are conditions that can result in roll out when a nonlocking snaphook is used:

Part Number	Material	Length	Wear Pad	Connection	Weight	Standard
4550	2 in. Polyester Web	6 ft. (1.8m)	NA	Stamped Steel D-ring	9 oz. (255g)	ANSI Z359.1-07
4550-3	2 in. Polyester Web	3 ft. (0.9m)	NA	Stamped Steel D-ring	8 oz. (227g)	ANSI Z359.1-07
4550-A	1-3/4 in. Polyester Web	6 ft. (1.8m)	NA	Drop Forged Steel D-ring	5 oz. (142g)	ANSI Z359.1-07
4550-E	1-3/4 in. Polyester Web	6 ft. (1.8m)	3 in. Nylon	Drop Forged Steel D-ring	1.5 lbs. (680g)	ANSI Z359.1-07
4550-SCS-4	7x19 1/4" Galvanized Steel Cable 1/16" Vinyl Coating	4 ft. (1.2m)	NA	Drop Forged Steel O-ring	1.5 lbs. (680g)	ANSI Z359.1-07
4550-SCS-6	7x19 1/4" Galvanized Steel Cable 1/16" Vinyl Coating	6 ft. (1.8m)	NA	Drop Forged Steel O-ring	1.7 lbs. (771g)	ANSI Z359.1-07
4550-U	1-3/4 in. Polyester Web	6 ft. (1.8m)	3 in. Nylon	Drop Forged Steel D-ring	1.5 lbs. (680g)	ANSI Z359.1-07
4550-U-3	1-3/4 in. Polyester Web	3 ft. (0.9m)	3 in. Nylon	Drop Forged Steel D-ring	1.2 lbs. (544g)	ANSI Z359.1-07
4551	1 in. Polyester Web	18 in. (0.5m)	NA	Drop Forged Steel D-ring	0.4 lbs. (181g)	ANSI Z359.1-07



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- Direct connection of a snaphook to horizontal lifeline.
- Two (or more) snaphooks connected to one D-ring.
- Two snaphooks connected to each other.
- A snaphook connected back on its integral lanyard.
- A snaphook connected to a webbing loop or webbing lanyard.
- Improper dimensions of the D-ring, rebar, or other connection point in relation to the snaphook dimensions that would allow the snaphook keeper to be depressed by a turning motion of the snaphook.

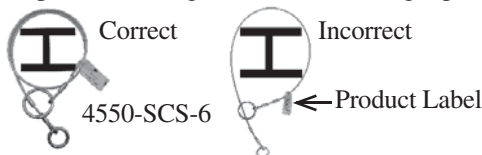
Performance

All 3M Cross Arm Straps meet the 5,000 lb. tensile strength when statically tested in accordance with the requirements of the ANSI Z359.1-2007 standard.

Installation

Cross Arm Straps must be installed on structures capable of meeting the anchorage strength requirements of OSHA 29 CFR 1910.66 and 1926.502.

The 4550-SCS-4 and 4550-SCS-6 must be installed in a double wrap choker configuration, or in a straight pull.



The 4550-A must only be installed in a basket or saddle configuration, with connection to both D-rings.

The 4551 must be installed in a choker configuration.

All other Cross Arm Straps may be installed in basket, saddle, or choker configurations.

Inspection

All Cross Arm Straps must be inspected prior to each use,

and additionally by an OSHA defined competent person other than the user annually.

To inspect webbing, bend a portion of the webbing 6-8 inches into an upsidedown 'U' shape and inspect all webbing for tears, cuts, fraying, abrasion, discoloration, burns, holes, mold, pulled or broken stitches, or other signs of wear and damage. Sewn terminations should be secure, complete, and not visibly damaged.

Cable must be inspected for kinks, broken strands, corrosion, abrasion, or other signs of wear and damage. Swaged terminations should be secure with the thimble tight, and not visibly damaged.

Any equipment that has been subjected to the forces of arresting a fall must be removed from service.

All Cross Arm Straps must be free of corrosion, chemical attack, alteration, excessive heating or wear.

All markings must be legible and attached to the product.

If inspection reveals any defect, inadequate maintenance, or unsafe condition, remove from service and destroy.

Note: Only manufacturer, or entities authorized in writing by the manufacturer, may make repairs to the product.

Cleaning and Maintenance

Cross Arm Straps can be wiped down with a mild detergent and clean water solution, and rinsed with a dampened clean cloth to remove detergent.



Product Warranty, Limited Remedy, and Limitation of Liability

WARRANTY: THE FOLLOWING IS MADE IN LIEU OF ALL WARRANTIES OR CONDITIONS, EXPRESS OR IMPLIED, INCLUDING THE IMPLIED WARRANTIES OR CONDITIONS OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. Equipment offered by 3M is warranted against factory defects in workmanship and materials for a period of one year from date of installation or first use by the original owner.

LIMITED REMEDY: Upon notice in writing, 3M will promptly repair or replace all defective items. 3M reserves the right to elect to have defective item returned to its plant for inspection before making a repair or replacement. Warranty does not cover equipment damage resulting from wear, abuse, damage in transit, or other damage beyond the control of 3M. 3M shall be the sole judge of product condition and warranty options. This warranty applies only to original purchaser and is the only warranty applicable to our products. A *Return Goods Authorization Number (RGA)* must be issued by 3M on all returns for warranty consideration. All returns must be shipped to 3M freight prepaid. Please contact 3M customer service department at 1-800-560-1094 for warranty assistance.

LIMITATION OF LIABILITY: In no event will 3M be liable for any indirect, incidental, special or consequential damages including, but not limited to loss of profits, in any way related to the products regardless of the legal theory asserted.

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