

Rope Grabs and Vertical Lifelines



Rope Grabs

Part No.	Description
415940	FP Pro Rope Grab with 3' Sure-Stop Lanyard, 36C snaphook
415941	Rope Grab with 12' fixed nylon lanyard, 36C snaphook
415942	Rope Grab kit with 50'-5/8" rope, polyester, anchorage connector strap
415943	Rope Grab kit with 100'-5/8" rope, polyester, anchorage connector strap
415964	Rope Grab kit with 50'-5/8" rope, polyester/propylene, anchorage connector strap
415965	Rope Grab kit with 100′-5/8″ rope, polyester/propylene, nylon anchorage connector strap
10054077	Rope Grab fall arrester

Rope Grabs and Vertical Lifelines

FP Pro Rope Grab

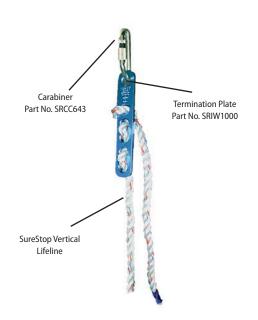
Unique, versatile, lightweight and affordable, the FP Pro Rope Grab features:

- · Hands-free operation while ascending or descending
- Ultra-smooth travel action
- Cam and hinge design allows for a quick, easy installation on the rope
- Available with either polyester or polyester/polypropylene blend rope
- Rope Grabs and ropes with 36C snaphook meet ANSI Z359.1-2007

Vertical Lifelines

	Part No.	Description	Length
	415865	5/8" polyester rope, w/36C Snaphook on one end	25'
1	415869	5/8" polyester rope, w/36C Snaphook on one end	50'
	415870	5/8" polyester rope, w/36C Snaphook on one end	75'
2	415871	5/8" polyester rope, w/36C Snaphook on one end	100'
	415872	5/8" polyester rope, w/36C Snaphook on one end	150'
	415873	5/8" polyester rope, w/36C Snaphook on one end	200'
	416048	5/8" polyester/polypropylene rope, w/twist-lock carabiner on one end	25'
2	416049	5/8" polyester/polypropylene rope, w/twist-lock carabiner on one end	50'
	416050	5/8" polyester/polypropylene rope, w/twist-lock carabiner on one end	75'
	416051	5/8" polyester/polypropylene rope, w/twist-lock carabiner on one end	100'
	416052	5/8" polyester/polypropylene rope, w/twist-lock carabiner on one end	150'
	416053	5/8" polyester/polypropylene rope, w/twist-lock carabiner on one end	200'





SureGrab™ Rope Grab

The SVLR78 SureGrab device and lifeline is used to provide temporary fall protection on ladders or when climbing vertical structures. This system can also be used to provide a secondary lifeline for suspended positioning systems used by building/structure inspectors, window cleaners, and maintenance personnel. The SureGrab device moves freely up or down an approved 5/8" (16 mm) diameter lifeline. When sudden downward movement occurs, a camming lever is activated arresting the fall. The device can be installed or removed from the lifeline at any point along its length.

Meets and exceeds ANSI Z359.1 and OSHA standards. SureGrab rope grabs are CSA certified.

SureGrab™ Rope Grabs

Part No.	Description	
SVLR78LS	Rope grab fall arrester, automatic/manual, open body, c/w 1-3/4" x 12" web lanyard, LS snaphook	
SRIW1000 5/8"Termination Plate		
SLLNL672060LS Lifeline, nylon, white 3-strand, 5/8" x 60-ft (16mm x 20m) with LS snap on one end		
SLLNL672100LS	Lifeline, nylon, white 3-strand, 5/8" x 100-ft (16mm x 30.5m) with LS snap on one end	
SLLNL672200LS	Lifeline, nylon, white 3-strand, 5/8" x 200-ft (16mm x 61m) with LS snap on one end	

Self-Retracting Lanyards



Workman PFL Lanyard

Features include:

- A field-replaceable lifeline
- A 400-pound working capacity
- No annual factory recertification required
- · Integral load indicator

- · Integral swivel at PFL/SRL connector
- A durable, engineered thermoplastic housing
- Meets ANSI A10.32 and all applicable OSHA standards. Compliance with ANSI Z359.1-2007 and certification to CSA Z259.2.2 is noted in the part number table.

Workman PFL (Personal Fall Limiter)

				Sta	ndards
Part No.	Description	PFL Connection	Lifeline Connection	CSA Z259.2.2	ANSI Z359.1-2007
10093348	Workman PFL, 12' line length	None	LI Snaphook		
10093349	Workman PFL, 12' line length	None	LC Snaphook		
10093350	Workman PFL, 12' line length	1" Steel Carabiner	LC Snaphook		
10093352	Workman PFL, 12' line length	Back D Connector	LC Snaphook		
10093353	Workman PFL, 12' line length	1" Steel Carabiner	36C Snaphook		Х
10093354	Workman PFL, 12' line length	None	36C Snaphook		Х
10093351	Workman PFL, 11'line length	Back D Connector	AL64 Snaphook		
10093355	Workman PFL, 10' line length	None	LI Snaphook	Х	
10093356	Workman PFL, 10' line length	None	LC Snaphook	Х	
10093357	Workman PFL, 10' line length	1" Steel Carabiner	LC Snaphook	Х	
10093358	Workman PFL, 10' line length	Back D Connector	LC Snaphook	Х	

Workman PFL Line Replacement Kits

Replacement Lifeline, 12' Length	Replacement Lifeline, 10' Length	Lifeline Connection
10093799	10093819	LI Snaphook
10093812	10093822	Swivel Carabiner
10093811	10093821	1" Aluminum Carabiner
10093800	10093820	1" Steel Carabiner
10093813	10093823	LS Snaphook
10093814	10093824	AL64 Snaphook
10093815	10093825	LC Snaphook
10093816	10093826	LS Swivel Snaphook
10093797	10093817	36C Snaphook
10093798	10093818	36CSN Swivel Snaphook
·		·



Attaching the snaphook to the integral swivel creates a comfortable, convenient carrying handle.

Workman Personal Fall Limiter Assemble-To-Order Matrix								
Approvals	Line	e Length		SRL Connector		Lifeline Connector	F	ield-Replaceable Line
CSA & OSHA	06	6'	0	None	0	LI Snaphook	N	No
ANSI Z359.1 & OSHA	07	7'	1	Back D-ring Connector	1	Swivel Carabiner	Υ	Yes
OSHA & ANSI A10.32	08	8'	2	1" Aluminum Carabiner	2	1" Aluminum Carabiner		
	09	9'	3	1" Steel Carabiner	3	1" Steel Carabiner		
	10	10'	4	2" Aluminum Carabiner	4	LS Snaphook		
	11	11'	5	2" Steel Carabiner	5	AL64 Snaphook		
	12	12'	6	36CL Snaphook	6	LC Swivel Snaphook		
					7	LS Swivel Snaphook		
					8	36C Snaphook		
					9	36CSN Snaphook		
,	CSA & OSHA ANSI Z359.1 & OSHA	CSA & OSHA 06 ANSI Z359.1 & OSHA 07 OSHA & ANSI A10.32 08 09 10	CSA & OSHA 06 6' ANSI Z359.1 & OSHA 07 7' OSHA & ANSI A10.32 08 8' 09 9' 10 10' 11 11'	CSA & OSHA	CSA & OSHA O6 6' 0 None ANSI Z359.1 & OSHA O7 7' 1 Back D-ring Connector OSHA & ANSI A10.32 O8 8' 2 1" Aluminum Carabiner O9 9' 3 1" Steel Carabiner 10 10' 4 2" Aluminum Carabiner 11 11' 5 2" Steel Carabiner	OSHA & OSHA ANSI Z359.1 & OSHA OSHA & ANSI A10.32 OSHA & ANSI A	CSA & OSHA ANSI Z359.1 & OSHA O7 7' 1 Back D-ring Connector 1 Swivel Carabiner OSHA & ANSI A10.32 O8 8' 2 1" Aluminum Carabiner 2 1" Aluminum Carabiner O9 9' 3 1" Steel Carabiner 3 1" Steel Carabiner 10 10' 4 2" Aluminum Carabiner 4 LS Snaphook 11 11' 5 2" Steel Carabiner 5 AL64 Snaphook 12 12' 6 36CL Snaphook 6 LC Swivel Snaphook 13 36C Snaphook 14 12 Swivel Snaphook 15 Swivel Snaphook 16 LS Swivel Snaphook 17 LS Swivel Snaphook 18 36C Snaphook	None CSA & OSHA O6 6' O None O LI Snaphook N

A-PFL			
Part Number			

- Quantity
- ATO orders will ship within 5 days of order
- Products ordered using the ATO System are non-returnable





Self-Retracting Lanyards



Aptura® SRL (Self-Retracting Lanyard)

					Stan	dards*
	Part No.	Description	SRL Connection	Lifeline Connection	CSA Z259.2.2	ANSI Z359.1-2007
	10050504	Aptura LT30, 30' line length	None	LI Snap	Х	
1	10053558	Aptura LT30, 30' line length	None	HL2000	Х	
1	10053560	Aptura LT30, 30' line length	1" Steel Carabiner	HL2000	Х	
1	10053559	Aptura LT30, 30' line length	1" Steel Carabiner	LS Snap	Х	
	10088386	Aptura LT30, 30' line length	None	36C		Х
	10088387	Aptura LT30, 30' line length	1" Steel Carabiner	36C		Х
1	10058886	Aptura LT30, 30' line length	None	Swivel LS	Х	

^{*} Only Aptura SRLs with 36C or 36CS snaphook *and* Back D-Ring Connector or 1" Steel Carabiner meet ANSI 7359 1-2007

Α	ptura LT Self-Retracting Lanyard Assemble-To-Order Matrix									
	Approval	Line Length SRL Connector			Lifeline Connector	Field-Replaceable Line				
N	Non-CSA	08	13'	00	None	00	None (Sewn Loop)	0	No	
С	CSA	09	14'	01	Back D-ring Connector (P/N 10089205)	01	HL2000 Snaphook (P/N 10002490)	1	Yes	
		10	15'	02	1" Aluminum Carabiner (P/N SCRA853)	02	Swivel HL2000 Snaphook (P/N 10023769)			
		11	16'	03	1" Steel Carabiner (P/N 10089207)	03	RL20 Snaphook (P/N 520603)			
		12	17'	04	2" Aluminum Carabiner (P/N SRCA722)	04	Swivel RL20 Snaphook(P/N 520691)			
		13	18'	05	2" Steel Carabiner (P/N 506308)	05	LI Aluminum Snaphook (P/N 10014393)			
		14	19'			06	1" Steel Carabiner (P/N SRCC643)			
		15	20'			07	1" Aluminum Carabiner (P/N SRCA853)			
		16	21'			08	1" Steel Swivel Carabiner (P/N 10021804)			
		17	22'			09	LS Snaphook (P/N SHWSS31690LS)			
		18	23'			10	AL64 Snaphook (P/N 10043811)			
		19	24'			11	LS Swivel Snaphook (P/N 10053393)			
		20	25'			12	LS Swivel Snaphook w/ Load Indicator (P/N 10038740)			
		21	26'			13	36C Snaphook (P/N 10088270)			
		22	27'			14	36CS Snaphook (P/N 10089159)			
		23	28'							
		24	29'							
		25	30'							
				L_		L				

A-APT					
Part Number				Quantity	

- ATO orders will ship within 5 days of order
- Products ordered using the ATO System are non-returnable

Self-Retracting Lanyards





The MSA Dyna-Lock Self-Retracting Lanyards (SRL) are fast-acting fall arresters that limit free-fall distance, deceleration distance, and fall arrest forces while allowing user freedom of movement. The Dyna-Lock SRL is ideal for climbing applications where vertical mobility is needed. All Dyna-Lock SRLs meet applicable OSHGA regulations and ANSO A10.32. See chart below for ANSI Z359.1-2007 and CSA compliance.

Capacity (working load)

For 20' web; 30', 50', 70' and 95' cable Dyna-Lock Models:

- Maximum: 400 lbs (181 kg)
- Minimum: 75 lbs (34 kg)

For 20' cable model:

- Maximum: 310 lbs (140 kg)
- Minimum: 75 lbs (34 kg)

Arrest Force

- 75-310 lbs < 900 lbf (4 kN)
- 311-400 lbs < 1800 lbf (8 kN)

Arrest Distance

- 75–310 lbs < 40 in (101.6 cm)
- 311–400 lbs < 54 in (137 cm)







Dyna-Lock Backpacker SRL in use



				St	andards
	Part No.	Model	Length	CSA Z259.2.2	ANSI Z359.1-2007
1	506202	Galvanized Wire Rope	10M (30')		Х
1	506204	Galvanized Wire Rope	16M (50')		Х
2	506206	Galvanized Wire Rope	22M (70')		Х
	506208	Galvanized Wire Rope	30M (95')		Х
2	506203	Stainless Steel Wire Rope	10M (30')		Х
2	506205	Stainless Steel Wire Rope	16M (50')		Х
	506207	Stainless Steel Wire Rope	22M (70')		Х
	506209	Stainless Steel Wire Rope	30M (95')		Х
1	506615	Nylon Web	20'		Х
1	10017931	Wire Rope Dyna-Lock	20'		Х
	506619	Backpacker, Web	20'		
2	10006470	Galvanized Wire Rope	30'	Х	
2	10006468	Galvanized Wire Rope	50'	Х	
	10006466	Galvanized Wire Rope	70'	Х	
	10006464	Galvanized Wire Rope	95'	Х	
	10006469	Stainless Steel Wire Rope	30'	Х	
	10006467	Stainless Steel Wire Rope	60'	Х	
	10006465	Stainless Steel Wire Rope	70'	Х	
	10006463	Stainless Steel Wire Rope	95'	Х	
	10006447	Nylon Web	20'	Х	
2	10017933	Stainless Steel Cable	20'	Х	
	10006446	Backpacker, web	20'	Х	

Backpacker SRL Part No. 506619

Confined Space Equipment

MSA confined space entry/retrieval systems are designed for fall arrest, lifting and lowering, rescue, and work positioning applications. They incorporate an anchorage connector, fall arrest component (Dyna-Lock, Dynevac II, Lynx Rescuer), a personnel and materials handling hoist (Lynx Hoist), and associated hardware to rig the system for use. The systems can be used for leading edge work, maintenance and entry/retrieval from manholes, tank cars, silos, tanks, vaults, pits, vats, and other confined space applications.



Lynx® Rescuer, Field Resettable Model with Lockout

- · Self-Retracting Lanyard with emergency retrieval capabilities
- User is able to reset device from retrieval mode to fall arrest mode
- The easiest, quickest field-reset mechanism on the market
- Same unit can be used in the field and for training situations
- Lock feature with key allows more control over who can reset unit to fall arrest mode
- Confined space entry provides fall arrest and emergency lifting and lowering
- · Meets ANSI Z359.1-2007, and all applicable OSHA standards, and CSA part numbers are CSA certified

Part No.	CSA Part No.	Description
10011744	10023016	50-ft (16m) Self-Retracting Lanyard with Emergency Rescuer, 3/16" diameter stainless steel line. With proper inspection, system may be reused after fall arrest and/or retrieval.
10011745	10023017	95-ft (30m) Self-Retracting Lanyard with Emergency Rescuer, 3/16" diameter stainless steel line. With proper inspection, system may be reused after fall arrest and/or retrieval.







Lynx Personnel/Material Hoist

- · Designed for lifting, lowering, and positioning of personnel and materials
- Maximum work load of 310 lbs for personnel and 620 lbs for materials
- · Anti-backlash crank handle with a lifting/lowering speed of 25 ft per minute
- · Integral shock absorber
- Load-limiting clutch prevents overloading of hoist
- Emergency drive allows manual bypass of load-limiting clutch for extra lifting capacity in an emergency
- · Primary gear backed up by two independent secondary brakes
- Air drive adapter enables powered lifting/lowering with optional air-powered drive assembly
- · Meets ANSI Z359.1-2007, and all applicable OSHA standards

Part No.	Description
10016569	Side mount with emergency drive and air drive adapter, galvanized wire rope, 50'
10016568	Side mount with emergency drive and air drive adapter, galvanized wire rope, 105'
10016683	Boom mount with emergency drive and air drive adapter, galvanized wire rope, 50'
10016682	Boom mount with emergency drive and air drive adapter, galvanized wire rope, 105'
506420	Lynx Hoist air drive assembly



Lynx Tripod

- · Automatic hinge lock legs
- · Constructed of three anodized aluminum legs and a zinc-plated carbon steel head
- Legs feature 1-1/4 in. incremental adjustment with positive locking pins
- Skid resistant feet with self-sharpening spikes

	Part No.	Description
	10022050	8' Lynx Tripod
Ċ	10022051	10' Lynx Tripod

Confined Space Entry Kits

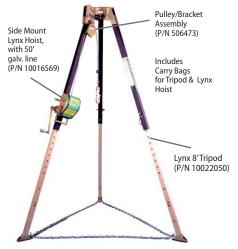
Confined Space Entry Kits make it easy for you to order the Confined Space System which best suits your needs—a single part number makes ordering simple. Tripod and Davit Kits allow for great portability, and Confined Space Kits with the Lynx Rescuer allow for non-entry rescue of a confined space entrant.

A training video and tripod carrying strap are included with each kit.

Split Mount Pulley (P/N 506222) Includes Carry Bags for Tripod & Lynx Rescuer Lynx Rescuer 16 m (P/N 10011744) Lynx 8'Tripod (P/N 10022050)

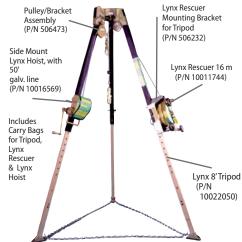
Part No.	CSA Part No.	Description
10023966	10048472	Lvnx Kit #1

Lynx Tripod Confined Space Entry Kit #2)



Part No.	Description
10023967	Lynx Kit #2

Lynx Tripod Confined Space Entry Kit #3



Part No.	CSA Part No.	Description	
10023968	10048473	Lynx Kit #3	



Folding Davit and Base

The Folding Davit and Base is a portable and economical anchorage connector used where a tripod will not work. Available with a zinc-plated alloy-steel Davit Arm and your choice of zinc-plated carbon steel or stainless steel Davit Base. This lightweight device provides a 24-inch reach and 77inches of head clearance. It pivots 360-degrees and can readily maneuver personnel and materials between spaces below the deck where it is mounted. The Folding Davit may be carried from base to base and installed in minutes. Meets or exceeds ANSI Z359.1, ANSI A10.32, and applicable OSHA requirements. Mounting brackets and pulleys sold separately.

Column Davit and Base

The Column Davit and Base are used for more permanent conditions where a tripod will not work. Available with a zinc-plated alloy-steel Davit Arm and zinc-plated carbon steel or stainless steel bases. Provides a 30 inch reach and 77 inches of head clearance. May be mounted to horizontal, vertical, and subsurface appropriate anchor points. Pivots 360 degrees. Meets or exceeds applicable OSHA requirements. Mounting brackets and pulleys sold separately.

Part No.	Description	
506613	Folding davit arm, 24" reach, 77" working height, swivels to extend over work area, folds for ease of transport and storage	
506614	Folding	davit base
506622		for mounting 10m (30 ft)/ 16m (50 ft) Dyna-Lock, c, and Lynx Rescuer to Folding davit
506362	Bracket ft) Dyna	(same as above), except for 22m (70 ft)/ 30m (95 a-Lock
506568		davit arm, 30" reach, 77" working height, boom ivels to extend over work area
506492	Surface	mounting receptacle for Column davit arm
506232	Dyneva	for mounting 10m (30 ft)/ 16m (50 ft) Dyna-Lock, c, and Lynx Rescuer to Column davit, aluminum es part no. 506590)
506216	Bracket ft) Dyna	(same as above), except for 22m (70 ft)/ 30m (95 a-Lock
506590		for mounting Dyna-Lock or Dynevac to Column equires part no. 506216 or 506232)
506603	Holster	to store Boom Mount Hoist when not in use
506668	Vertical	davit arm - Ladder Mount
506667	Recepta ladder)	acle for Vertical davit arm - Ladder Mount (bolts to
415837	tracts to	ull davit - Ladder Mount, bolts to ladder and re- o allow hatch cover to close, extends 60" above when extended
Dart	No	Description

Part No.	Description
SSH3505017	Bosun Chair, 5" x 16-1/2" padded seat, black nylon straps, 2 carabiners

Bosun Chair

The Bosun Chair is the best method to sit suspended for long durations. The padded seat ensures your comfort during use. The adjustable web assembly ensures security. Designed to be used in conjunction with our Full Body Harnesses, the Bosun Chair, attached to the chest D-ring, will keep the user in the upright position.



Ladder Climbing Equipment

SureClimb™ Temporary Cable System

The SureClimb Temporary Ladder Cable System is designed to provide fall protection when climbing or descending ladders or vertical structures up to 300 ft in height. Applications include telecommunications towers, light poles, water towers, hydroelectric towers, stacks, and any other climbable structure. The SureClimb temporary system:

- Is available in 2 versions; with an integral shock absorber, or with an energy-absorbing top mounting bracket
- Uses a 5/16" galvanized steel cable
- Allows for quick and easy attachment to approved ladder or structure
- Includes an integral, adjustable line weight
- Uses a stainless steel fall arrester (ordered separately)
- Meets all applicable OSHA regulations and ANSI standards
- CSA certified

SureClimb™ Permanent Cable System

The SureClimb Permanent Ladder Cable System is designed to provide fall protection when climbing or descending ladders or vertical structures up to 300' in height. Applications include telecommunications towers, light poles, water towers, hydroelectric towers, stacks, and any other climbable structure. The SureClimb permanent system:

- Includes energy-absorbing, galvanized steel top and bottom mounting brackets
- Uses a 5/16" galvanized steel cable
- Incorporates cable guides to minimize cable vibration and wear
- Uses a stainless steel fall arrester (ordered separately)
- Meets all applicable OSHA regulations and ANSI standards
- Is CSA certified and meets ANSI A14.3-1992

50 ft (16 m)	100 ft (30 m)	150 ft (46 m)	200 ft (61 m)	Description
SFPLS353050	SFPLS353100	_	SFPLS353200	Temporary SureClimb System with integral shock absorber Additional lengths available from 50 ft. up to 200 ft. in 50 ft. increments
SFPLS350050	SFPLS350100	SFPLS350150	SFPLS350200	Permanent SureClimb System Additional lengths available from 20 ft. up to 300 ft. in 10 ft. increments

	Part No.	Description
2	10040010	SureClimb Slider (fall arrester) with carabiner (for both temporary and permanent cable systems)
	10036032	SureClimb Extension Davit and Base Assembly (for temporary cable system)



SureClimb Slider can be attached and removed anywhere along the length of cable

10040010

cable system)

Part No. 10036032

Part No.

SFPLS350050

Dyna-Glide® Climbing Protection System

The Dyna-Glide Climbing Protection Systems are used to prevent and/or arrest falls from heights and also enhance the way a climber is able to perform the necessary work. Our systems can be mounted to already-installed ladders, to corners of lattice towers, and to almost any other suitably strong structure your crew needs to climb.

- · Limits total fall distance to inches
- Offers components for complete rescue systems
- · Allows for vertical and horizontal mobility
- · Uses galvanized or stainless steel for corrosion resistance
- Offers your choice of Ladder Rail Combination (LRC) or Rail only
- Provides smooth travel there's no binding of the fall arrester inside the rail
- Uses detachable, lightweight, stainless steel and aluminum mechanism for hands-free ascent and descent
- Is CSA certified and meets ANSI A14.3-1992

Taken together, the Dyna-Glide System is designed to be installed without modification to the structure and can be assembled with simple hand tools.



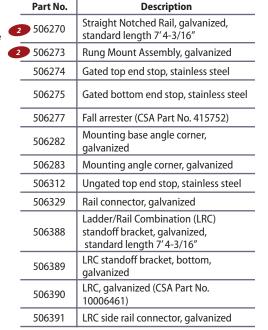
LRC Combination (Part No. 506390)

- Rungs incorporate skid-resistant surface
- Can be curved or bent for your specific application
- Constructed of galvanized steel
- Standard length: 7'4-3/16"
- Standard width: 18"

Fall Arrester (Part No. 506277)

- Mechanical locking mechanism to reduce fall distance
- Permits hands-free ascent and descent
- Constructed of aluminum and stainless steel
 Carabiner not included

For more complete information on the Dyna-Glide System, see the Dyna-Glide Catalog (Bulletin 2300-22-MC).



Temporary Horizontal Lifelines

Temporary Synthetic Horizontal Lifelines

Designed for easy installation and removal, these temporary horizontal lifeline systems were created for a wide range of applications. The system may be mounted to any suitable 5,000 lb-rated anchorage. Both systems can be rigged using many standard components, reducing the need for special or "engineered" equipment.

Dyna-Line® HLL

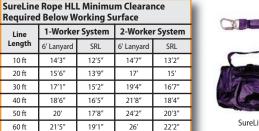
- Highly visible 12-strand red rope will not hackle and minimizes fall distance due to its low stretch properties
- · Available in a Single-Worker or Two-Worker system
- Available in lengths up to 200 ft. System comes in a handy bucket for lengths up to 60 ft.
- · Meets all OSHA requirements and ANSI A10.32 standards

SureLine™ HLL

- · Includes integral energy absorber
- 5/8" black nylon kernmantle rope
- Available in lengths up to 60 ft
- · Rated for two workers
- · Includes 2 cable anchor slings
- Includes storage bag

Part No.	Description
10013150	Dyna-Line Temporary Horizontal Lifeline for single worker, 30 ft rope
10013151	Dyna-Line Temporary Horizontal Lifeline for single worker, 60 ft rope
10019084	Dyna-Line Temporary Horizontal Lifeline for single worker, 100 ft rope
10022826	Dyna-Line Temporary Horizontal Lifeline for single worker, 200 ft rope
10013152	Dyna-Line Temporary Horizontal Lifeline for two workers, 30 ft rope*
10013153	Dyna-Line Temporary Horizontal Lifeline for two workers, 60 ft rope*
10019085	Dyna-Line Temporary Horizontal Lifeline for two workers, 100 ft rope*
10022827	Dyna-Line Temporary Horizontal Lifeline for two workers, 200 ft rope*
SHL1009035BLK	SureLine Temporary Horizontal Lifeline, 35 ft black rope
> SHL1009060BLK	SureLine Temporary Horizontal Lifeline, 60 ft black rope

^{*} Dyna-Line Two-Worker system includes 2 polyester anchorage straps.



Clearances based on Lifeline 4' above working surface

Line Length

10 ft

20 ft

30 ft

40 ft

50 ft

14'3"

18'6"

20'

21'5"



SureLine Temporary Horizontal Lifeline for Two Workers Part No. SHL1009060BLK



Dyna-Line Temporary Horizontal Lifeline for Two Workers Part No. 10013152

	Dyna-Line Rope HLL Minimum Clearance Required Below Working Surface			
Line	1-Worke	r System	2-Worker System	
Length	6' Lanyard	SRL	6' Lanyard	SRL
10 ft	14′10″	12′5″	15′10″	13'2"
20 ft	15′9″	13'8"	17′2″	14′9″
30 ft	16′10″	15′1″	19'4"	16'6"
40 ft	18'0"	16′4″	21'4"	18'3"
50 ft	19'3"	17'6"	23'2"	20′1″
60 ft	20'6"	18′9″	25′1″	22′

Clearances based on Lifeline 4' above working surface

SureLine[™] Temporary Cable Horizontal Lifeline

The SureLine temporary Horizontal Lifeline is a lightweight cable system that is suspended between two approved anchor points to provide worker fall protection during horizontal movement. Designed for quick and easy installation at temporary work sites, the SureLine system:

- · Includes an integral shock absorber
- Available in 2 models, with or without turnbuckle
- Available in 20 ft, 40 ft, or 60 ft lengths
- Rated for up to 2 people
- Uses a 3/8", 6x36 galvanized cable
- Incorporates a combination clamp/thimble that allows for effortless tensioning of lifeline
- Meets all OSHA requirements and ANSI A10.32 standards.

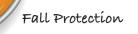
Part No. Des		Description
2	SHL2009040	Steel Cable Horizontal Lifeline System with turnbuckle, 40 ft (12 m)
Steel Cable Horizontal Lifeline System with turnbuckle, 60 ft (1		Steel Cable Horizontal Lifeline System with turnbuckle, 60 ft (18 m)
	SHL2009040IW	Iron Worker Cable Horizontal Lifeline System without turnbuckle, 40 ft (12 m)
	SHL2009060IW	Iron Worker Cable Horizontal Lifeline System without turnbuckle, 60 ft (18 m)

SureLine Cable HLL Minimum Clearance Required Below Working Surface				
Line	1-Worker System		2-Worker System	
Length	6' Lanyard	SRL	6' Lanyard	SRL
10 ft	14′1″	12'2"	14'6"	13'2"
20 ft	15′1″	13′1″	16′7″	14'8"
30 ft	16'2"	14'	19'	16'4"
40 ft	17′3″	14'9"	21′	18′
50 ft	18'4"	15′7″	22′7″	19'6"
60 ft	19′5″	16′5″	24'3"	21′4″

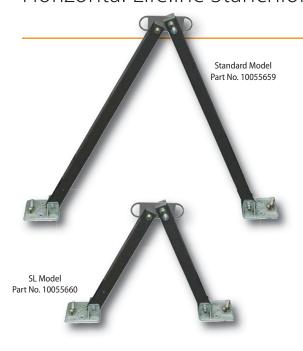
Clearances based on Lifeline 4' above working surface



SureLine Steel Cable System



Horizontal Lifeline Stanchions



SkyLink® HLL Stanchion

- Accommodates two workers per system
- Lightweight weighs only 21 pounds, making it easily installed, removed, and handled by 1 person
- No tools required for installation when using pour-in-place anchor, making it easy to install sets up in minutes!
- Can be used as single point anchor attachment, providing fall protection for workers while installing horizontal lifelines
- Aluminum and steel construction increases durability to ensure long service life
- Offers two installation methods to concrete, a pour-in-place anchor for new construction or concrete expansion bolts for existing construction, providing versatility to meet the requirements of your application
- Folding leg stanchion design makes the stanchion easy to carry and convenient to store
- Meets ANSI A10.32 and OSHA requirements



Designed to support horizontal lifelines in two directions (in-line with D-ring head)



Can be used as single point anchor while connecting lifeline

Part No. Description		
1	10055659	Skylink Stanchion, Standard model - 44" height (pour-in-place Pigtail or concrete expansion anchors must be ordered separately)
1	10055660	Skylink Stanchion, SL model - 23" height (pour-in-place Pigtail or concrete expansion anchors must be ordered separately)
D	10055721	3.25" concrete expansion anchor with nut and washer
	10059805	0.5" x 12" pour in place "Pigtail" anchor with washer and vinyl cap
	10059806	Skylink Stanchion Kit including 2 - Standard stanchions with 60' 2-worker Dyna-Line 10013151 (without anchor straps) and 4 Pigtail anchors
	10059807	Skylink Stanchion Kit including 2 - Standard stanchions with 60' Sure-Line for Iron Workers (p/n SHL2009060IW), and 4 Pigtail anchors
	10059808	Skylink Stanchion Kit including 2 - SL stanchions with 60' 2- worker Dyna-Line (p/n 10013153 - without anchor straps) and 4 Pigtail anchors
	10059809	Skylink Stanchion Kit including 2 - SL stanchions with 60' Sure-Line for Iron Workers (p/n SHL2009060IW), and 4 Pigtail anchors



D6 HLL Stanchion for Horizontal Lifeline Part No. SHLARD6A

D6 HLL Stanchion

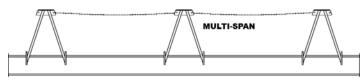
The D6 HLL Stanchion is an anchorage connector used for the installation of horizontal lifeline systems. Designed with a jaw clamp screw, D6 HLL Stanchions are easily installed on steel girders or base plates fitted to bridge rail ties to provide a strong stable connection point for the approved horizontal lifeline system.

Anchorage Bracket also features:

- · Constructed of galvanized steel
- Collapsible A-frame for easy transport & storage
- Meets all applicable OSHA regulations & ANSI standards

Part No.		Description
2	SHLARD6A	D6 HLL Stanchion A-frame design, galvanized steel





Permanent Horizontal Lifelines



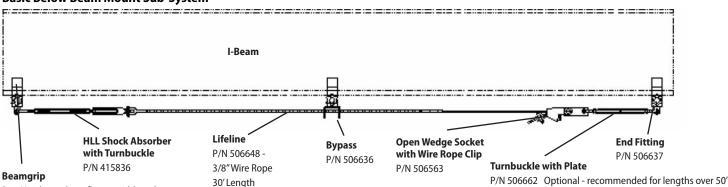
Horizon® Horizontal Lifeline

The MSA Horizon Horizontal Lifeline anchorage connecting system is designed for portability, versatility, ease of installation, and ease of use. The system may be mounted to existing overhead steel beams or to newly constructed steel structure where overhead anchorage points are not available. Horizontal travel through intermediate supports is achieved without disconnection of the worker's personal fall arrest system. The system may accommodate up to five

persons. The unique shock absorber reduces dynamic forces transmitted to the anchorage points. Stanchion system may be installed on the top or bottom flange of an I-beam.

Typical applications include new construction (steel erection), inspection and maintenance operations, loading bays, bridges, overpasses, aircraft hangars, manufacturing, petrochemical, chemical, and food processing plants. Meets OSHA requirements.

Basic Below Beam Mount Sub-System



Part No. depends on flange width and thickness, see part no. list below.

Part No. Description 506682 Beamgrip for beams with flange width: 3.94" to 5.64", flange thickness: .205" to .659" 415171 Beamgrip for beams with flange width: 5.525" to 8.07", flange thickness: .36" to 1.09"

Beamgrip for beams with flange width: 10.265" to 12.8", flange thickness: .605" to 1.25" 415173 415836 Horizontal lifeline shock absorber 506563 3/8" open wedge socket 506636 Beamgrip bypass fitting 506637 Beamgrip end fitting 506648 3/8" wire rope, galvanized, length must be specified at the time of order 506662 12" turn buckle with plate

415172 Beamgrip for beams with flange width: 8.06" to 10.475", flange thickness: .56" to .935" (30'); 1 - 506636; 1 - 506563; 1 - 506662; 2 - 506637

/!\WARNING

Parts required for this system: 3 Beamgrips (Part No. depends on size of beam flange); 1 - 415836; 1 - 506648

OSHA regulations state "Horizontal Lifeline Systems shall be designed, installed and used under supervision of a qualified person, as part of a complete fall arrest system, which maintains a safety factor of at least two." A qualified person is defined as "one with a recognized degree or professional certificate and/or extensive knowledge and experience in the subject field, who is capable of design, analysis, evaluation and specifications in the subject work, project or product." MSA can provide a qualified person to design and install a Horizontal Lifeline System. Contact the MSA Engineering Service Department.

Below Beam HLL Kits

Choose from 4 kits.

30 ft kits include

506663

506254

506255

- 2 beamgrips (choose from P/N 415171 or P/N 415172)
- 2 end fittings (P/N 506637)
- Shock absorber (P/N 415836)
- Lifeline (P/N 506648 30 ft)
- Open wedge socket (P/N 506563)
- Turnbuckle (P/N 506662)

60 ft kits include

- 3 beamgrips (choose from P/N 415171 or P/N 415172)
- 2 end fittings (P/N 506637)
- Shock absorber (P/N 415836)
- Lifeline (P/N 506648 60 ft)
- Open wedge socket (P/N 506563)
- Turnbuckle (P/N 506662)
- Manual Bypass (P/N 506636)

Part No.	Description
10030270	HLL Kit #1, 30' Below Beam system, for I-beams with flange width 5.525"–8.07" and flange thickness .36"–1.09"
10030271	HLL Kit #2, 60' Below Beam system, for I-beams with flange width 5.525"–8.07" and flange thickness .36"–1.09"
10030272	HLL Kit #3, 30' Below Beam system, for I-beams with flange width 8.06"–10.475" and flange thickness .56"–.935"
10030273	HLL Kit #4, 60' Below Beam system, for I-beams with flange width 8.06"–10.475" and flange thickness .56"–.935"

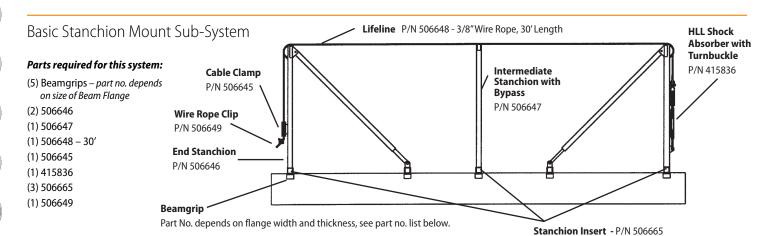


Snatch block pulley for 3/8" wire rope

for 1/2" wire rope

for 5/8" wire rope

Permanent Horizontal Lifelines



Horizon HLL Minimum Clearance Required Below Working Surface				
Line	1-Worker System		2-Worker System	
Length	6' Lanyard	SRL	6' Lanyard	SRL
10 ft	13'4"	5′0″	13′11″	5′4″
20 ft	14'4"	5′6″	14′10″	6′3″
30 ft	15'0"	6′1″	15′7″	6′9″
40 ft	15′9″	6′9″	16′3″	7′5″
50 ft	16'4"	7′3″	16′9″	8′0″
60 ft	16′9″	7′9″	17′5″	8'6"
70 ft	17′5″	8'3"	17′10″	9'0"
80 ft	17′11″	8'9"	18′5″	9'6"
90 ft	18'4"	9'3"	18′11″	10'0"
100 ft	18'9"	9′7″	19'5"	10′5″

Part No.	Description
506682	Beamgrip for beams with flange width: 3.94" to 5.64" flange thickness: .205" to .659"
415171	Beamgrip for beams with flange width: 5.525" to 8.07" flange thickness: .36" to 1.09"
415172	Beamgrip for beams with flange width: 8.06" to 10.475" flange thickness: .56" to .935"
415173	Beamgrip for beams with flange width: 10.265" to 12.8" flange thickness: .605" to 1.25"

Part No.	Description
415836	Horizontal lifeline shock absorber
506645	Cable clamp
506646	Beamgrip end stanchion
506647	Beamgrip bypass stanchion
506648	3/8" wire rope*, 30', galvanized

Description		
Wire rope clip 3/8"		
Snatch block pulley for 3/8" wire rope		
for 1/2" wire rope		
for 5/8" wire rope		
Beamgrip stanchion insert		

Stanchion HLL Kits

Choose from 4 kits.

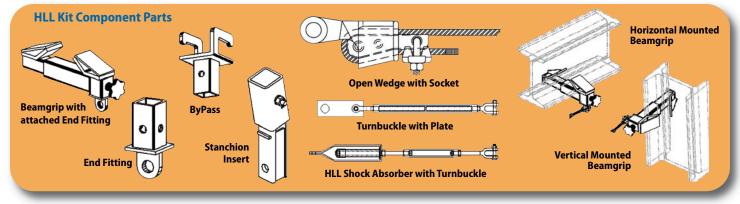
30 ft kits include

- 4 beamgrips (choose from P/N 415171 or P/N 415172)
- 2 end stanchions (P/N 506646)
- 2 stanchion inserts (P/N 506665)
- Lifeline (P/N 506648 30 ft)
- Wire rope clip (P/N 506649)
- Cable clamp (P/N 506645)
- Shock absorber with turnbuckle (P/N 415836)

60 ft kits include

- 5 beamgrips (choose from P/N 415171 or P/N 415172)
- 2 end stanchions (P/N 506646)
- 3 stanchion inserts (P/N 506665)
- Lifeline (P/N 506648 60 ft)
- Wire rope clip (P/N 506649)
- Cable clamp (P/N 506645)
- Shock absorber with turnbuckle (P/N 415836)
- Intermediate Stanchion with Manual Bypass (P/N 506647)

Part No.	Description	
10030274	HLL Kit #5, 30' Stanchion system, for I-beams with flange width 5.525"–8.07" and flange thickness .36"–1.09"	
10030275 HLL Kit #6, 60' Stanchion system, for I-beams with flange width 5.525" – 8.07" and flange thickness .36" – 1.09		
10030276	HLL Kit #7, 30' Stanchion system, for I-beams with flange width 8.06"–10.475" and flange thickness .56"–.935"	
10030277	HLL Kit #8, 60' Stanchion system, for I-beams with flange width 8.06"–10.475" and flange thickness .56"–.935"	



Rescue Equipment: FP Rescue™ Pulleys & Components



Eight, Steel Part No. SRSF5045

Stealth Rigging Plate Part No. SRSPR5990

SuretyMan™ Pulleys

Designed to meet the rigorous standards of the professional rescuer. Built with high grade aluminum side plates and sheaves, oilite bearings, stainless steel bolts, washers, and lock nuts make these some of the best pulleys available. The aluminum side plates swivel and rotate to allow the pulley to be attached anywhere along the rope. The top holes of the side plates are large enough to accept three carabiners. Contain Prusik design (squared corners of the side plates) to provide rope security with a Prusik hitch. Pulleys accept 3/8" (1cm) to 1/2" (1.3 cm) static kernmantle ropes. Side plates are powder coated. Strength: 2" (5 cm) Double 8,100 lb (36 kN), 4" (10 cm) Double 11,200 lb (49 kN).

SuretyMan™ Mini Knot Passing Pulley

The Suretyman Mini Knot Passing Pulley was designed for the professional rescue team concerned with size and weight. The Suretyman Mini Knot Passing Pulley features:

- Ample room for the passing of knots
- Size: 9-1/2" (24 cm) tall, 4" (10 cm) wide, 3" (7.6 cm) deep
- Aluminum sheave (that will not score like some of the plastic sheaves)
- · Locking pin
- Weight: 1.9 lb (.89 kg)
- Half the size and weight of some of the larger, bulkier knot passing pulleys

SuretyMan™ Edge Roller

The best way to protect your rope from sharp edges and reduce rope friction. High quality construction. The 6"x 10" (15.3 cm x 24.4 cm) base is rubber covered to reduce slippage. The bottom and side plate feature attachment holes for ease of security in any situation. Added slots in the base plate accept tube webbing for security. Two edge rollers are required (sold separately). Two quick links are required (sold separately). Edge roller is 4"(10 cm) tall. Weight: 2.8 lb (1.3 kg).

SuretyMan[™] Q-Eight

- Ears/cleat are positioned to make tie off very easy and safe
- Ears/cleat still prevent larks footing (girth hitch)
- Designed for 7/16" (11 mm) diameter rope (will work with 1/2" (12 mm) diameter rope)

- · Aluminum, anodized gold
- Strength 13,000 lbs (58 kN)
- Weight 8 oz (.24 kg)

SuretyMan™ Rescue Eight

- Designed for rope diameters from 7/16" (11 mm) to 5/8" (16 mm)
- Strength 6,720 lb (30 kN)
- $\bullet\,$ Designed for the fire service, rescue, and police tactical operations
- Available in aluminum or steel
- Weight 1.5 lb (675 g)

SuretyMan™ Rigging Plates

Stealth Riggin Plate: Anchor on the point and the wings will rotate toward the load for a straighter line of pull. Material aluminum. Weight: .46 lb (250g). Strength: 11,000 lb (48 kN). Color: Teal

Stretcher Rigging Plate: Designed to unclutter and organize litter rigging points, reducing the chance of error. Material aluminum. Weight: .74 lb (330g). Strength: 12,200 lb (54 kN). Color: Teal

SuretvMan™ Carabiner

- Traditional large "D" design
- Developed for fire and rescue communities
- · Manual locking
- Certified to meet NFPA 1993-1995, Class "G"
- Carbon steel, zinc-plated
- Strength 12,364 lbs (55 kN)
- Weight 11 oz (311g)
- Gate opening 1.2" (32mm)

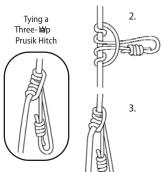
Part No.	Description
SPPPU8708	SuretyMan Pulley, 2" (5 cm) double, Std/Prusik, orange, aluminum, weight: .83 lb (375 g)
SPPPU8710	SuretyMan Pulley, 4" (10 cm) single, Std/Prusik, yellow, aluminum, weight: 1.2 lb (545 g)
SPPPU8717	SuretyMan Pulley, 4" (10 cm) double, Std/Prusik, orange, aluminum, weight: 1.8 lb (840 g)
SPPPU8720	SuretyMan Mini Knot Passing Pulley, yellow, weight: 1.9 lb (.89 kg)
SPPRL4000	SuretyMan Edge Roller, aluminum, weight: 2.8 lb (1.3 kg) - [two required]
SMI420560	Quick Link 5/16" (8 mm) for use with Suretyman Edge Roller - [two required]
SRSF5077	SuretyMan Rescue Eight, aluminum
SRSFFE2120	SuretyMan Q-Eight
SRSPR5990	SuretyMan Stealth Rigging Plate, aluminum, teal
SRSPR5980	SuretyMan Stretcher Rigging Plate, aluminum, teal
SRCC641	Carabiner, 1.2" (32mm) gate, steel

Stretcher Rigging Plate

Rescue Equipment: FP Rescue Ropes











Static Kernmantle Ropes

These ropes are 100% ermanent solution dyed color with contrasting marker stripe. Superior flexibility and knotability, provided by a unique double-twist cable core construction, gives superior resistance to abrasion that is up to four times greater than other static kernmantle ropes. These ropes are designed with load absorbing capabilities to provide additional safety in the event a dynamic force is applied.

Prusik & Accessory Cords

Prusik cords have the same high quality and long wear design as rescue ropes. Siz selection should be based upon diameter of the main line. The flexible cord is both strong and highly resistant to abrasion. Prusik cords and accessory cords are identical.

Rope Storage Bags

Rope Storage Bags are made of tough Cordura nylon fabric. Features include a drawstring top, handle/shoulder strap, and carabiner loops at top and bottom. h the bottom of the bag there is an inside loop for the end of the rope, or it can pass through the bottom grommet. Available in orange and black colors.

Rope Bag #
Part No. SRB43020

Part No. Description	
SRP508760050 7/16" (11 mm), nylon, 6,500 lb (2,948 kg), black, 50'	
SRP504860SL050 1/2" (12 mm), nylon, 9,100 lb (4,128 kg), white/orange tracer, 5	
SRP508960050	5/8" (16 mm), nylon, 11,400 lb (5,171 kg), black, 50'
SRP530961050	1/2" (12 mm) polyester, 9,100 lb (4,128 kg), red, 50'
SRP510660SL050	3/8" (10 mm), nylon, 5,000 lb (2,269 kg), white/blue tracer, 50'
SRP544000050	7/16" (11 mm), nylon, 6,500 lb (2,722 kg), olive, 50'
SRP504866SL050	1/2" (12 mm), nylon, 9,000 lb (4,083 kg), white/blue tracer, 50'
SRP504863SL050	1/2" (12 mm), nylon, 9,000 lb (4,083 kg), red/white tracer, 50'
Additional lengths are available in 1-foot increments	

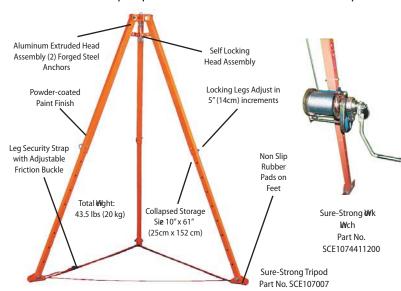
Part No.	Description
SRP500860	8 mm Accessory Cord, nylon. Use with 1/2"-5/8" (1.3cm-1.6cm) main line, black, 3,100 lb (1,406 kg)
SRP500900	9 mm Accessory Cord, nylon. Use with 1/2"-5/8" (1.3cm-1.6cm) main line, 3,600 lb (1,632 kg)
SRP500500050	5 mm Accessory Cord, nylon, 1,275 lb (578 kg) strength, 50'
SRP5020550050	5.5 mm Titian ord, Sprectra Core, nylon, 4.500 lb (2.042 kg) strength, 50'

7 mm Accessory Cord, nylon. Use with 3/8"-1/2"

(1cm-1.3cm) main line, red, 2,600 lb (1,179 kg), 50'

Description	
Rope Bag #, orange, holds 120-ft / 1/2" (36.6m / 12 mm) rope	
Rope Bag #, black, holds 120-ft / 1/2" (36.6m / 12 mm) rope	
Rope Bag ∄, orange, holds 200-ft / 1/2" (60.1m / 12 mm) rope	
Rope Bag ∄, black, holds 200-ft / 1/2" (60.1m / 12 mm) rope	
Rope Bag ∄, orange, holds 300-ft / 1/2" (91.4m / 12 mm) rope	
Rope Bag 3, black, holds 300-ft / 1/2" (91.4m / 12 mm) rope	
Rope Bag 6 , orange, holds 600-ft / 1/2" (182.8m / 12 mm) rope	
Rope Bag 6 , black, holds 600-ft / 1/2" (182.8m / 12 mm) rope	

Rescue Equipment: FP Rescue Tripod



Sure-Strong[™] Tripods

Sure-Strong Tripods feature:

SRP500700050

- · Adjustable aluminum legs
- · Two forged steel anchor eyes in head assembly
- · Head assembly prevents unintentional collapse of tripod
- Legs adjust and lock individually to accommodate variable anchor heights, uneven ground, and compact storage
- Leg security strap prevents legs from spreading in the event of excessive loading
- Available with a cordura nylon storage bag
- Rated for 2 people with a working load of 1,100 lbs

Part No.	Description
SCE107007	Sure-Strong 7-ft (2m) tripod, aluminum, 10,000 lb (48 kN)
SCE107010	Sure-Strong 10-ft (3m) tripod, aluminum, 10,000 lb (48 kN)
SCE1074411200	Sure-Strong work winch, 200-ft (61m) galvanized wire rope, with bracket (compatible with Lynx Tripod and Sure-Strong Tripod)



SuretyMan™ Rescue Utility System

The SuretyMan Rescue Utility System incorporates all the features professionals have come to expect from a first class rescue system. The system is primarily used for raising and lowering people or equipment in rescue and industrial work access and is ideal for confined space applications.

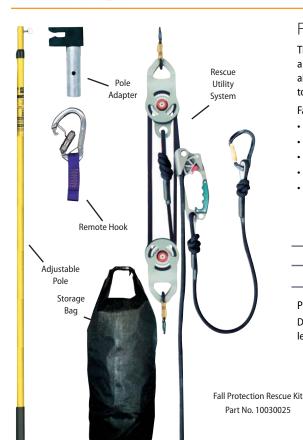
The SuretyMan Rescue Utility System features:

- Pulleys equipped with a built-in anti-reversing lock
- Only a 10 lb force is required to hold a 220-lb (90 kg) load
- SuretyMan ascender attached to both the operating rope and the user via a securing rope—
 if the operating rope accidentally releases, the ascender automatically stops the descent
- Rapid deployment
- · Virtually maintenance free
- · Rated for 2-person load
- Compact and light weight with a standard system weight of 17 lb (7.7 kg)
- · Versatile for rescue & access
- Multi-purpose ascent or descent
- Rated capacity of 600 lb (272 kg) for personnel and materials
- Standard rope length of 200 ft (66m) with a maximum rope length of 800 ft (267m)

	Part No.	Description
2	SRS15200	SuretyMan Rescue Utility System (200' length)

PLEASE NOTE:

Due to a 4:1 mechanical advantage, the user should order the Rescue Utility System with 4 times the length of rope necessary for their application. For example, the 200' system listed above provides a 50' working length. A 800' system provides a 200' working length.



Fall Protection Rescue Kit

The Fall Protection Rescue kit is designed to be an "out of the bag" rescue system. This kit combines a remote hook and extension pole with a rescue utility system. The remote hook and extension pole allows for remote attachment of a rescue line to a victim. The Rescue Utility System allows a rescuer to raise or lower the victim to safety. This kit should be used with a back-up system (not included).

Fall Protection Rescue Kit includes:

- Adjustable Pole, 6 ft (1.8m) to 12 ft (3.6m) (P/N SFP675009)
- Pole Adapter (P/N SCE109001) converts pole to hold remote hook
- Remote Hook (P/N SRCA401) for remote attachment
- Storage Bag (P/N SRB675009) for pole and remote hook
- Rescue Utility System (P/N SRS15200) raising and lowering system with a 4:1 mechanical advantage

Part No.	Description
10030025	Fall Protection Rescue Kit

PLEASE NOTE:

Due to a 4:1 mechanical advantage, the user should order the Rescue Utility System with 4 times the length of rope necessary for their application.



Basic High Angle Rescue Kits

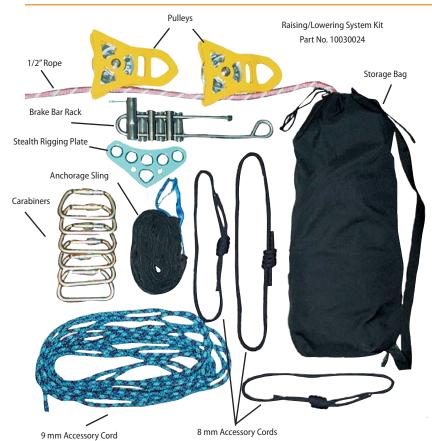
The Basic High Angle Rescue Kits were designed for the Fire Department planning to assemble a high angle rescue team. A complete high angle rescue system consists of two kits: a Belay System Kit, and a Raising/Lowering System Kit.



The Belay System Kit includes:

- 3 large "D" shaped rescue carabiners (P/N SRCC641) - NFPA approved Class G
- 200-ft (61m) 1/2" rope, orange and white (P/N - SRP504860SL) - NFPA approved
- 33-ft (10m) 9mm accessory cord (P/N - SRP500900) for making load- release hitch
- 65" (1.65m) 8mm accessory cord & 53" (1.35m) accessory cord (P/N - SRP500860) make-up the tandem Prusiks
- 6-ft (1.8m) Suretyman anchorage sling (P/N - SFP2267406)
- #3 rope bag, orange (P/N SRB430301)

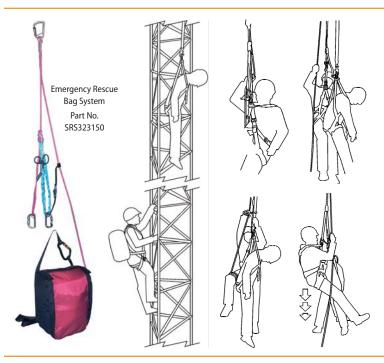
Part No.	Description
10030023	Belay System Kit



The Raising/Lowering System Kit includes:

- 6 large "D" shaped rescue carabiners (P/N - SRCA641) - NFPA approved Class G
- Stealth rigging plate (P/N SRSPR5990)
- 200-ft (61m) 1/2" rope, red (P/N SRP504863SL) -NFPA approved
- 33-ft (10m) 9mm accessory cord (P/N - SRP500900) for making load-release hitch
- 65" (1.65m) 8mm accessory cord & 53" (1.35m) accessory cord (P/N - SRP500860) make-up the tandem Prusiks
- 53" (1.35m) 8mm accessory cord (P/N SRP500860) for creating the Prusik for connecting the raising system
- 2 Single Pulleys, 4" (100mm) (P/N SPPPU8710) Prusik minding pulleys
- Brake Bar Rack (P/N SRS14001) lowering device is NFPA approved
- 6-ft (1.8m) Suretyman anchorage sling (P/N - SFP2267406)
- #3 rope bag, black (P/N SRB430305)

Part No.	Description
10030024	Raising/Lowering System Kit



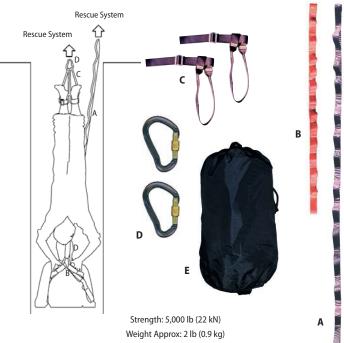
Emergency Rescue Bag System

The Emergency Rescue Bag System is designed for rescue on electrical and communication towers. Developed for use in restrictive environments, this extremely lightweight system was primarily designed for tower rescue; however, the system can be used to perform rescues on almost any vertical structure. The Emergency Rescue Bag System consists of a pre-rigged lowering System that comes in a variety of lengths. The users of this product must receive training by an approved trainer.

Part No.	Description
SRS323150	Emergency Rescue Bag System, 150-ft (45 m) working length
SRS323300	Emergency Rescue Bag System, 300-ft (90 m) working length

PLEASE NOTE:

Due to a 2:1 mechanical advantage, the user should order the Emergency Rescue Bag System with twice the length of rope necessary for their application. For example, the SRS323150 uses 300' of rope to achieve a 150' working length. The maximum system available provides a 400' working length with 800' of rope.



Confined Space/Head First Extraction System

The Confined Space/Head First Extraction System (HFES) is a specialized rescue product designed for those extreme cases where the rescuer has no other option, but to be lowered head first into a confined space to perform a rescue. These cases are rare, but can happen when someone has fallen into a restrictive confined space such as a well or drain system. The system allows the rescuer to be lowered comfortably into a confined space head first, harness the victim, and raise both victim and rescuer out of the confined space. This small, compact sytem can be used with any confined space retrieval equipment such as tripods and davits.

The HFES consists of the following components:

- Adjustable Lifting Strap (A)
- Adjustable Victim Strap (B)
- 1 Pair of Ankle Harnesses (C)
- 2 Carabiners (D)
- Storage Bag (E)

Part No.	Description
SRS3100	Confined space head first extraction system



Bucket Truck Evacuation Kit

The Bucket Truck Evacuation Kit was created to provide all necessary equipment to allow a worker to safely evacuate an aerial bucket that has become inoperative. The kit includes:

- #2 Rope Bag (P/N SRB430205)
- 10-ft Synthetic Ladder with Swivel Snaphook P/N SCE405010)
- Boom Anchor Strap (P/N SSB22040)
- Anthron system (P/N SDC726075) which includes Anthron device, Carabiners (2), 75-ft (22m) 7/16" rope

Part No.	Description
SKITSMT001	Bucket Truck Evacuation Kit







Firefighters Escape Kit

The Firefighters Escape Kit was created as a tool for emergency egress for a fire fighter trapped in an upper floor of a building. This kit is lightweight and easy to use.

Firefighters Escape Kit includes:

- 2 Suretyman aluminum auto-locking carabiners (P/N SRCA853)
- 60 ft (18.3 m) 9mm rope (P/N SRP500900)
- · Mini Q-Eight
- · Small stuff sack

Part No.	Description
10030026	Firefighter's Escape Kit



SKED Basic Rescue System

The best solution for confined space, high angle or technical rescue, and traditional land-based applications, the Sked stretcher is a revolutionary design which provides outstanding patient protection and security. The Sked stretcher comes equipped for horizontal hoisting by helicopter or vertical hoisting in caves or industrial confined spaces. When the patient is secured, the stretcher becomes rigid. The durable plastic provides protection for the patient while allowing extrication through the most demanding confined spaces. The stretcher is rolled for storage in a tough cordura backpack which is included in the system. The system ships at 19 lb (8.6 kg) and comes complete for most applications.

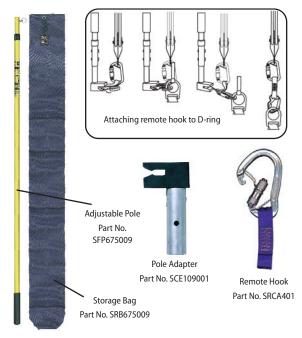
Each Sked Basic Rescue System comes complete with:

Sked Stretcher

- Vertical lift sling
- Cordura backpack/towing harness
- Tow strap

- · Horizontal lift slings
- Removable webbing handles

Part No.	Description
SRSSK200	Sked Basic Rescue System, International orange



Rescue Pole/Remote Hook

The Rescue Pole/Remote Hook is designed as a rescue tool for the retrieval of a worker suspended in a fall arrest system or for remote rescue access. In most cases, the need for the rescuer to go to the fallen worker (victim) is limited. The Rescue Pole can be used in a wide variety of rescue applications and will serve as an excellent tool to help perform a safer, efficient rescue. The system consists of an adjustable fiberglass pole, pole adapter, and remote hook. A nylon storage bag is optional.

Part No.	Description
SFP675009	Adjustable pole, fiberglass 6 ft (1.8m) to 12 ft (3.6m)
SFP675012	Adjustable pole, fiberglass 8 ft (2.4m) to 24 ft (7.3m)
SRCA401	Remote hook, aluminum, with web sling
SCE109001	Pole adapter, aluminum/rubber
SCE109003	Pole adapter, 6 ft (1.8m), aluminum/rubber
SRB675009	Storage bag for FP675-009

Rescue Equipment: Cradles, Ladder & Etrier



Rescue Cradles

The Rescue Cradle is available in two model types. The SRH30701 model is designed to allow easy placement on a person. Equipped with 4" (10 cm) polyester webbing and 4 - 3" (7.6 cm) D-rings. One size fits all.

The Rescue Cradle, model SRH30703, is designed to be very similar to the SRH30701 model, except it is constructed with 1 - 3/4" (4.4 cm) nylon webbing, 2" (5 cm) attachment ring, and an elastic shoulder strap.

Part No.	Description
SRH30701 Rescue Cradle, 4 D-rings, 4" (10 cm) polyester webbing	
SRH30703	Rescue Cradle, 2" attachment ring, 1-3/4" (4.45 cm) nylon webbing

Rescue Ladders

Our Rescue Ladders has synthetic rope with reinforced fiberglass rungs. Applications include: confined space access, theatrical stage rigging, mine access, and many others. Our steel cable ladder meets and exceeds the ESTA (Entertainment Services and Technology Association) ladder standard for stage work and theatrical rigging.

Part No.	Description	
SCE400020	Rescue Ladder, synthetic rope, 20 ft (6.1 m)	

Rescue Etrier

Etrier is French for a set of ascending web stirrups sewn or tied together. The Etrier is useful for stretcher tendering and other vertical activities including getting over difficult edges. The six-foot loops are reinforced/stiffened for easier foot placement and abrasion resistance.

Length: 7 ft (2.1 m). Weight: 9 oz (280 g).

Part No.	Description	
SRS3200	Rescue Etrier, 1" web, 7 ft (2.1 m)	

General Accessories



Hands-Off Chisel Grip Part No. 10040018



Hands-off™ Chisel Grip

The Hands-Off Chisel Grip keeps hands away from the point of contact. The Hands-Off Chisel Grip is ergonomically designed to match the specific shape of the human hand for a comfortable and firm grip. Additional features of this modern design include:

- Permits faster, safer, more accurate work
- · Easy adjustment to hold a variety of chisels and stakes up to 1" in diameter
- · Vibration-absorbing handle
- · Eases awkward hand positioning
- · Economical
- · Spark resistant

Part No.		Description		
•	10040018	Hands-Off Chisel Grip		

Ergonomic Tool Holders

- Holds wrenches, chisels, etc.
- · Attach to broom handles and mops for better grip
- · Vibration-absorbing design
- · Eases awkward hand positioning

Part No.		Description	
2	507005	Tool Holder, 18"	
2	507006	Tool Holder, spark resistant, 18"	





Calculating Total Fall Distance

Knowing how to calculate Total Fall Distance is just as important as selecting the proper harness, lanyard, anchorage connector, and anchorage point for the specific task to be performed. Total Fall Distance (TFD) is defined as the sum of Freefall Distance (FFD), Deceleration Distance (DD), Harness Effects (HEFF), and Vertical Elongation (VEL). It is also wise to include a Safety Factor (SF) of at least one foot in the formula. Total Fall Distance can be calculated using the following formula:

TFD = FFD + DD + HEFF + VEL + SF

Before we can begin to calculate Total Fall Distance, we first need to define the variables in the formula above.

Freefall Distance (FFD): The vertical distance a worker travels between the onset of a fall until just prior to the point where the Fall Arrest System begins to arrest the fall. Federal OSHA limits this distance to 6' or less. To keep FFD to a minimum, you should always try to keep your anchor point as far above the back D-ring of the harness as possible.

Deceleration Distance (DD): The vertical distance a worker travels between the activation of the Fall Arrest System and final fall arrest. Federal OSHA limits this distance to 3.5' or less. The DD that each shockabsorbing fall arrest device will permit is typically stated on the product label.

Harness Effects (HEFF): The stretch of a harness during fall ar rest. This is typically one foot or less for a properly-fitted harness. However, some harnesses use elastic-type webbing that can increase the harness effects to two feet or more.

Vertical Elongation (VEL): The stretch in the lifeline of the Personal Fall Arrest System. Vertical Elongation is measured on the part of the lifeline that is under tension during deceleration and final fall arrest. This variable will change drastically depending upon the type of Fall Arrest System you are using. For example, most shock-absorbing lanyards are designed to have a maximum deceleration distance of 3.5', which includes the vertical elongation of the lanyard. However, if you are using a rope grab system or a horizontal lifeline, vertical elongation must be calculated based on the stretch of the vertical or horizontal lifelines in those systems. You will need to check the specific manufacturers' product for exact stretch percentages.

Safety Factor (SF): An additional factor of safety to ensure that you have the required clearance below your work ng surface. This variable should be at least one foot, but can reflect any number with which you feel comfortable.

For illustration purposes, we will use the following equipment:

- Full Body Harness (non-elastic)
- · 6' Shock-Absorbing Lanyard
- Fixed, Rigid Anchorage Connector (such as a D-Plate bolted to a structural I-beam)

In *Figure 1*, we see a worker with a 6' Shock-Absorbing Lanyard on an elevated platform. In this example, let's assume that his attachment point is 2' above the back D-ring of the harness. For every 1' the lanyard attachment point is above the harness back D-ring, 1' is deducted from the Freefall Distance. For every 1' that the lanyard attachment point is below the harness back D-ring, 1' is added to the Freefall Distance (see *Table 1*). In this scenario, if the worker falls, the Freefall Distance (FFD) will equal 4' since the lanyard attachment point is 2' above the back D-ring of the harness.

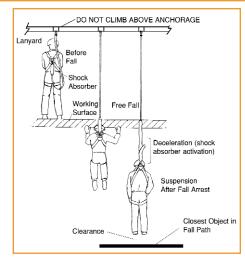


Figure 1.

FreeFall Distance for various Shock-Absorbing Lanyard Lengths and Elevations of Anchorage Connection Point.	Length of Shock-Absorbing Lanyard			
Distance of Anchorage Connection Point Above (+) or Below (-) Harness Fall Arrest D-Ring	6'	5'	4'	3'
+3	3	2	1	0
+2	4	3	2	1
+1	5	4	3	2
0	6	5	4	3
-1	7	6	5	4
-2	8	7	6	5
-3	9	8	7	6
-4	10	9	8	
-5	11	10		
-6	12			
	FreeFall Distance			

Table 1.

So, our formula looks like this:

TFD = 4' + DD + HEFF + VEL + SF

The next variable to consider is Deceleration Distance (DD). Federal OSHA requires that this distance not exceed 3.5′. Since all manufacturers′ product is slightly different, you should read the label on the product you intend to use to determine the maximum deceleration distance of that product. When calculating Total Fall Distance, the maximum deceleration distance that a product will permit should always be used. In our example, the maximum deceleration distance would be 3.5′.

TFD = 4' + 3.5' + HEFF + VEL + SF

The Harness Effects variable is relatively constant at less than one foot. This will vary slightly due to the adjustment of the harness, so we generally use one foot to account for these slight differences. However, elastic-type harnesses can have more than one foot of stretch, possibly two feet or more, and that additional

distance must be accounted for in your calculation. In our example, we are using a non-elastic harness to keep our Total Fall Distance to a minimum.

TFD = 4' + 3.5' + 1' + VEL + SF

Most manufacturers design their Shock-Absorbing Lanyards so that the vertical elongation of the lanyard is included in the OSHA mandated 3.5' maximum deceleration distance. However, if we were using a rope grab or horizontal lifeline, or if you were attaching to a non-rigid anchorage connector, VEL would need to be calculated based on the specifications of those components in your Fall Arrest System. Since we are using a 6' Shock-Absorbing Lanyard in our example and the VEL is already considered in the lanyard design, we will enter a "0" for the VEL variable.

TFD = 4' + 3.5' + 1' + 0' + SF

The final variable of the formula is the Safety Factor. It is always a good idea to include at least a 1' safety factor; however, the safety factor could reflect any number that makes you comfortable with your calculation.

Now we can solve our Total Fall Distance Formula:

$$TFD = 4' + 3.5' + 1' + 0' + 1'$$

TFD = 9.5'

Now we know that if the worker in *Figure 1* would happen to fall, his Total Fall Distance will be 9.5'.

But what does this number really mean?

It means that the clearance between the working surface and the next closest object in the fall path must be at least 9.5'. It is important to remember that Total Fall Distance is not always measured from the working surface to the ground, because sometimes the ground is not the closest object be neath the working platform. If there is any type of obstruction in the fall path of the worker (see Figure 2), vour available clearance is measured from the working platform to the top of that obstruction. Sometimes these distances can be very short, and a fall protection means other than a 6'

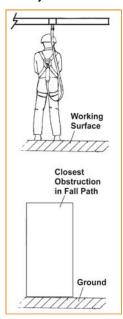
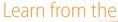


Figure 2.

shock-absorbing lanyard is necessary. Total Fall Distance calculations can become more complex than those demonstrated here. The numbers and variables will change depending upon the type of Personal Fall Arrest System used. For example, when calculating Total Fall Distances for Horizontal Lifeline Systems you have additional variables to consider, such as cable deflection and the number of people on the system. The important thing to remember is that calculating Total Fall Distance is just as important as selecting the right product for the job. Forgetting to calculate Total Fall Distance is just as dangerous as forgetting to put on your harness before you begin to perform any work at heights.



MSA Training



MSA offers the following ANSI Z359 Compliant Fall Protection training courses:

MSA training courses are compliant to the new ANSI Z359 family of fall protection standards and meet "ANSI Z490.1 2001 Criteria for Accepted practices in Safety, Health, and Environmental Trainina".

Qualified Person Training

This course will train the Qualified Person in the use of all fall protection equipment and systems encountered in work and includes the following;

- · Fall protection regulations
- · Equipment use, selection and inspection
- · Preparing fall hazard surveys
- · Developing engineering system standards
- Determining system clearance requirements
- Designing and selecting anchorages
- · Designing new and evaluating existing horizontal systems
- · Developing written fall protection procedures and rescue procedures
- · Determining potential impact forces

Authorized Person Training

This course will train the Authorized Person to inspect, anchor, assemble and use the fall protection in work applications. The Authorized Person training will include the following information;

- · Fall hazard recognition
- · Fall hazard control methods
- Fall protection regulations
- · How to use written fall protection procedures
- · Equipment use, selection and inspection
- Fall protection rescue procedures

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Administrator Training

This course will train the Fall Protection Program Administrator to have a working knowledge of current fall protection regulations, standards and fall protection equipment and systems. The fall protection program administrator training will include the following:

- · Fall protection regulations
- · Developing and maintaining a managed fall protection program
- · Fall hazard surveys
- Selection and appointment of safety committee personnel
- · Fall protection system selection
- Development of approved equipment purchase lists
- Selection and appointment of qualified and competent people
- · Development of engineering system standards

Competent Rescue Training

This course will train the Competent Fall Protection Rescuer how to select, inspect, anchor, assemble and use fall protection and rescue equipment in their work applications. The Competent Fall Protection Rescuer training will include the following:

- Fall hazard control methods
- · Fall protection and rescue regulations
- Assessment of fall hazards to determine appropriate rescue methods
- · Training on suspension trauma
- · Equipment use, selection and inspection
- · Rescue system assessment
- Development of written fall protection rescue procedures

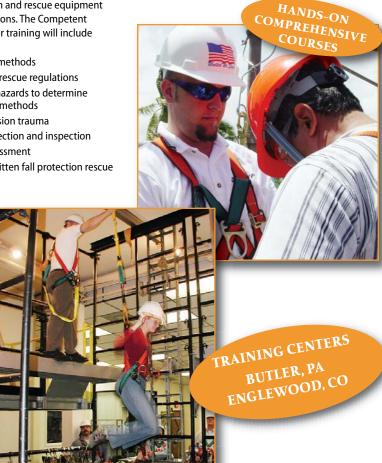
Authorized Rescuer Training

This course will train the Authorized Fall Protection Rescuer how to select, inspect, anchor, and use fall protection and rescue equipment in their work applications. The Authorized Fall Protection Rescuer training will include the following:

- Fall hazard recognition
- · Fall hazard control methods
- Fall protection and rescue regulations
- · Training on suspension trauma
- · How to use written fall protection and rescue procedures
- Inspection of rescue and fall protection equipment components and systems before use

Other courses available include:

- Competent Person for "Safety-At-Heights"
- · Fundamentals of safety at heights
- Competent Person for equipment inspection
- Tower climbing safety
- Confined space entry



REGISTRATION INFORMATION

We invite you to attend our next training session, which will prove to be a comprehensive and valuable experience. For registration information, please contact the MSA Customer Service Center by phone (1.800.672.222) or by fax (1.800.967.0398), or log onto our web site at www.MSAnet.com.

Online training is also available



MSA University, MSA's premier online training center, offers a wide range of training and informational materials. Register today at www.MSAnet.com/MSAU

MSA Custom Solutions







Every business is unique, and MSA recognizes that YOUR Fall Protection systems need to be custom-designed and installed to meet YOUR needs.

To help you, we have carefully selected and trained specially qualified contractors, who can personally work with YOU to deliver exactly the services your hazardous situations demand.

These MSA Fall Protection System Integrators are independent organizations throughout North America whose local specialists can provide one or more customized MSA Fall Protection solutions for your business. Your MSA System Integrators will combine their experience and knowledge of practical applications with MSA Fall Protection products to meet your specific needs for any industry, including forestry, construction, oil & gas, petrochemical, mining, manufacturing, utilities, entertainment, and transportation.

Whether you choose complete turnkey services or individual services, you'll receive experienced application and design, fabrication, and installation of whatever MSA Fall Protection systems you need.

For more information call MSA Customer Service Center at 1-800-672-2222 and request the Custom Solutions Catalog (Bulletin #2300-100).

Engineering Services

Registered professional engineers will visit your site to analyze and determine the scope of work. Then they will design and draft engineering drawings, and later, follow up with a construction site review to ensure that your Fall Protection system has been installed as designed.

Installation

Factory-trained and certified installation technicians will execute the design specifications and carry out the manufacturer's instructions. Technicians can also inspect and re-certify an existing MSA Fall Protection system.

Fabrication

Knowledgeable fabricators will build all structural components that are required to support your primary MSA Fall Protection system, from simply connecting brackets that attach to your building columns or beams, to assembling complete free-standing support structures. You can trust that your fabricated components will comply with all applicable governing codes and standards.

Training

High quality training programs at a reasonable cost will be tailored to the unique issues of your industry and installation. MSA's commitment to increasing demands for technical training in Fall Protection, post-fall retrieval, and rescue will be fulfilled at your facility.

Why Choose MSA Custom Solutions?

- You get the broadest product range, to ensure the best possible fall hazard solution for your specific application.
- MSA System Integrators work directly for you and are responsive to your project requirements.
- MSA System Integrators offer cost-effective services direct to you, the MSA customer.
- You will benefit from dedicated regional System Integrators as well as nationally prominent organizations that specialize in particular industry applications.

How?It's easy!

To receive your quotation from MSA CUSTOM SOLUTIONS:

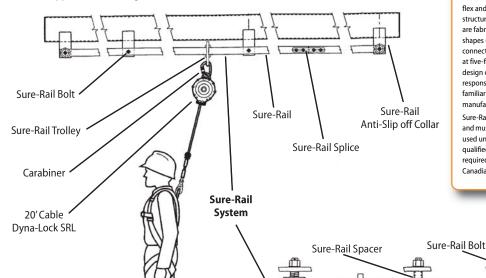
- Contact your local MSA distributor, MSA Sales Associate, or call our MSA Customer Service at 1-800-672-2222.
- Your request will be forwarded to the MSA System Integrator, who will contact you about your project's specific requirements.
- 3. You will receive a written estimate for your ystem.

MSA Custom Solutions

Sure-Rail™ Horizontal Lifeline

The Sure-Rail system is a rigid rail horizontal lifeline system typically used in areas when there is limited clearance below the working surface. The Sure-Rail system is available in many standard configurations, but can also be customized to fit your application. The Sure-Rail system provides:

- Ease of movement (smooth trolley action)
- · Little or no deflection in the rail limits fall distance and fall arrest forces on the body
- Support for up to 4 workers on the system simultaneously.
- Meets all applicable OSHA regulations



The Sure-Rail horizontal rail system is installed by attachment to intermediate support members that act to stabilize the rail during normal flex and movement of the building structure. The intermediate supports are fabricated from hollow structural shapes (HSS). The HSS supports are connected to the rail by welded tabs at five-foot (1.5 m) intervals. The design of the HSS supports are the responsibility of a qualified engineer familiar with the project and manufacturer's requirements. Sure-Rail is an engineered system and must be designed, installed, and

Sure-Rail is an engineered system and must be designed, installed, and used under the supervision of a qualified structural engineer, as required by US Federal OSHA and Canadian Provincial regulations.

Top View

Sure-Rail Trolley

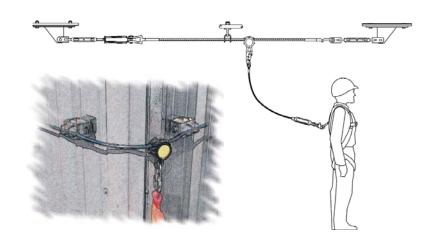


Sure-Rail Trolle

Latchways Mansafe® Horizontal Lifeline

The Latchways ManSafe Horizontal Lifeline systems are designed to operate horizontally, around corners, and up or down inclines to offer continuous worker protection regardless of the building type or structure. ManSafe Horizontal Lifeline features include:

- · Unsurpassed system flexibility
- Ability to support up to 6 workers per lifeline
- Unique Latchways Transfastener rotates freely through intermediate supports to enable hands-free operation



Side View