

# **Suspended Access & Fall Prevention**

Let's face a simple fact; a vast number of windows that need cleaning are out of the reach of hands, poles and even ladders. Windows on office buildings and other commercial facilities can only be reached with special equipment like window cleaning platforms, powered lifts, or even bosun chairs hanging from the roofs with ropes. These are commonly referred to as chairs. In some cities the chairs are subject to local laws; be sure to check with your local OSHA office before you consider using this equipment in your city. Be sure to take safety training classes designed for your geography.

It cannot be stressed enough how dangerous all these types of work are, and how a serious focus on safety is an outright requirement. In 2004, thirteen window cleaners died when their SAFETY EQUIPMENT WAS EITHER USED INCORRECTLY, OR NOT AT ALL. When using any of this specialized access equipment, it is imperative that safety harnesses are properly used, and that all parts of the safety equipment are regularly examined and replaced when appropriate. Below we describe the different ways buildings can be accessed, and the safety precautions that must be taken.

Suspended Platforms: Like a hanging scaffold, the Suspended Platform provides a stable work surface for two people. The platform is raised and lowered by climbing steel cables that are secured to davit arms on the roof. The davit arms and their mounting points must be professionally designed and installed. Electric motors at each end of the platform are controlled by the operators and are what raise and lower the platform by actually climbing and descending the steel cables. The workers in the platform must wear fallprevention harnesses at all times, and their safety lines must be secured to independent mounting points on the roof; if the platform falls, the workers will hang in position until rescued. These suspended platforms are often owned by the buildings and stored on site. They can also be rented by specialist rental companies.

Mechanical Lifts: Boom lifts and scissor lifts, and any aerial man-lifts are motorized platforms that Window Cleaners can stand on and manipulate to reach work areas. Safety harnesses with lanyards (attached to the lifts themselves, p. 52 and 58) must be worn at all times. These lifts are typically rented by local companies, and are delivered on a large truck. Safety harnesses must also be worn when working in areas where there is a danger of falling further than 6 ft.

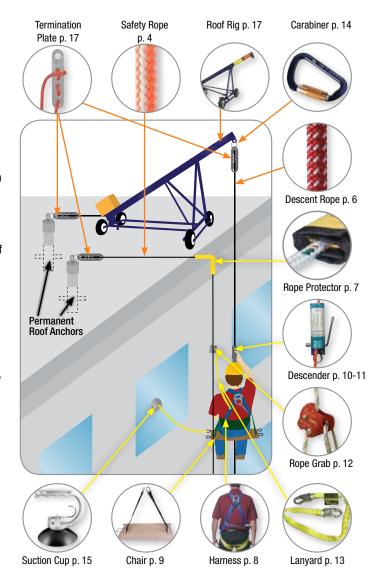
Bosun's Chairs: These one-person seats can quickly get workers to the desired location. They can typically only go down, so workers must go all the way down to the ground, unhook, then ride the elevator back up. There are several pieces of equipment necessary to safely utilize a chair system:

- A Roof Rig is weighted and acts like a temporary davit, and can be easily moved from drop location to drop location along the edge of the roof and then secured; this gets the rope away from the edge of the building (see MIO's line on page 125). Descent and safety ropes can also be attached to approved anchors on the roof, but rope protectors (page 115) must be used where ropes go over parapets and other building features.
- Termination Plates (page 125) should be used instead of a knot. Carabiners secure these plates to the approved anchor point. Knots may weaken a rope by about 50%, these termination plates dramatically increase the strength.
- Ropes (p. 112 and 114) are an integral part of a chair operation; one rope is used to support the worker's chair, another hangs next to the worker and acts as a safety line. The descent line and safety ropes must be attached to different approved anchor points on the roof.
- A Descender (p. 118 -119) is a device that attaches the chair to the rope, and actually slides down the rope so the worker can descend in a slow and controlled fashion.
- The full-body Safety Harness (p. 116) is worn by the worker. A "D" Ring (carabiner) on his back or front attaches to a lanyard which attaches to a rope
- Rope Grabs do what their name implies, they grab the safety rope. These

- quality metal devices (p. 120 -121) can slide up a rope, but can only slide down if manipulated by the worker. The rope grab should always be above the worker's head to shorten a fall.
- Suction Cups (p. 123) are stuck to windows and help workers stay in the area where they want to clean.

#### **ROPE SAFETY**

**CAUTION:** Rope failure can cause SERIOUS INJURY OR DEATH. FIBER ROPE WILL FAIL IF WORN, DAMAGED, ABUSED, OVERLOADED OR NOT PROPERLY MAINTAINED. • USER is responsible to determine the suitability of a rope for specific applications . KNOW the working load limit (WLL) of your rope • DO NOT exceed the WLL • USE ONLY rope in good condition, without cuts or pulled strands • USE ONLY equipment that is the correct size for the rope • REMOVE rope from service if it has been shock loaded • AVOID abrasion or cutting by using rope protectors • DO NOT bend rope around unprotected sharp corners • CLEAN ropes function better and last longer.



## **Rope Safety**

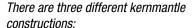


There are several considerations for choosing the right rope for your application. Listed below are a few items to consider before choosing.

- Construction
- Control
- Size
- Decent Control Device
- Weight
- Control

#### CONSTRUCTION

The preferred rope construction for Rope Descent Systems are Kernmantle Constructions. Kernmantle constructions are used in Rope Descent Systems because they are a balance construction and won't rotate. Kernmantle ropes consist of a cover that is braided around twisted core varns. There are two different kinds of kernmantle rope, static and dynamic. Dynamic ropes have very long elongation characteristics, and should not be used in Rope Descent Systems. Static ropes have low elongations and offer superior control and safety for work placement systems.



#### KMIII - 32 Carrier Kernmantle

KMIII static rope is a balanced construction consisting of a continuous filament polyester cover braided over a unidirectional nylon core. KMIII is a perfect construction for rappelling and work placement. With its



A lump in a static line



Two or three strands have been cut in this rope



A severely abraided rope



A picked strand on a dynamic climbing line

balanced construction and lower profile construction KMIII will perform consistently better in most approved decent devices. KMIII is a widely used rope for working lines.

#### KMIII MAX - 32 Carrier Kernmantle 1 over 1 Pattern

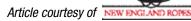
KMIII MAX is a the same construction as the KMIII, but has the added feature of a TPT Cover. This cover reduces drag and has more abrasion resistance than KMIII. This cover has a lower profile, and will make for a smoother system thru most decent control devices.

#### Braided Safety Blue - 16 Carrier Kernmantle

The first is a 16 strand w/ safety blue core. This 16-strand rope has a cover consisting of tightly-plied polyester and polypropylene surrounding blue core yarns. These blue yarns act as an indicator should the rope become severely abraded or cut. The rope is coated in a special coating that enhances the ropes abrasion resistance and extends its life. By the nature of the construction these ropes have an excellent track record as a superior life line.

#### Rope Inspection:

Rope inspection is the single most important aspect of Rope Descent Systems. For comprehensive information on using Rope Decsent Systems please read the current ANSI standard for window cleaning





IWCA I-14.1-2001 which is available for purchase, see page 16. Most items in rope inspection are identifying potential reductions in tensile strength of ropes. The below items can significantly reduce the tensile strengths of ropes.

#### Damage to look for:

- · Braids are cut
- Worn fibers
- · Hardness or stiffness
- · Dirt or grit clogged in the fibers
- Rust, tar, or grease is present
- Line size has been reduced
- Subjected to shock load
- Exposed to chemicals that affect their strength
- Exposed to excessive UV degradation
- Subjected to Rapid Descent

If any of these items are found on your rope you should retire it or have it inspected by a certified professional.

#### The inspection process:

You should run your hand along the entire length of the rope with careful attention to the following indicators:

- Inspect the entire length of rope regardless of use
- If sheath is cut through retire the rope
- If rope diameter is localized larger or smaller than rope, retire the rope
- If rope feels mushy in spots retire the rope
- If rope feels brittle in spots retire the rope
- Ropes with unknown history should not be used as a safety or working rope
- According to ANSI I-14.1 2001 working lines should be used for only 2 years, and should be retired after 3 years (after the date of manufacture.)

#### The Do's and Don'ts of Rope

- Inspect Ropes before every use
- Store in Cool Dry Place
- Keep a Rope Log
- Reverse Rope Ends Regularly
- Clean Rope

#### Don't

- Share ropes
- Clean with bleach
- Step on rope
- · Leave on ground
- Drag on ground
- Store in sunlight

Safety: The life of a climbing rope depends greatly on its use, damage and on care, cleaning, and storage.

Storage: Climbing rope should be stored, preferably after drying, at room temperature, ideally in a storage bag.

**Cleaning**: Climbing ropes should be washed occasionally by hand in cold water with a mild soap, rinsed free of the soap, and then spread out or hung up to dry in the air. Avoid direct sunlight, do not use a dryer, and do not place the rope above a heat source.





Up close and personal. A macro shot of dirt; these sharp miniature rocks can actually cut and damage rope. Keep your rope out of the dirt.

# **The Best of Sky Genie**



The Sky Genie system is an integrated system of rope descending equipment for all kinds of exterior building maintenance. Unlike other descent methods, which are a collection of components from many different makers, the Sky Genie System is made up of carefully matched components that are designed to work together. Your safety comes first.

The Sky Genie system is simple and easy to learn, but requires training from an experienced professional. A video training CD is available (see page 53) to assist you in learning the basics of Sky Genie descent. However, the video alone will not be sufficient unless you supplement it with on the job training. Independently Anchored Safety Line with a Rope Grab and Lanyard is required for safe use. See pages 51 - 64 for additional safety equipment and accessories for high rise work. Consult your local OSHA office for specific regulations.

Sky Genie Descent Rope 1/2 in.

Construction: 18 braids of nylon fiber for maximum strength Tensile Strength: 5,000 lbs.

Recommended for Sky Genie Descender

- High Temperature with Shock absorbing elasticity
- Preformed eye at each end with a length of abrasion protection
- Each line stamped with serial number and assembly date

300 ft. 90-25 \$365.00

**Sky Genie Canvas Storage Bag** 

Canvas storage bags for rope and equipment. Equipment Bag 91-204 \$134.50



#### **Sky Genie Rope Protector**

- · Attach cord to secure to your line for desired position
- · Protect you line against cutting or abrasions
- 18 inches in length

91-221 \$25.25



#### Sky Genie Tie-Off Pad

- Use as an anchor point when tying off to a beam, girder, or rooftop structure
- Support at least 5,000 lbs.
- Strong Nylon webbing with 2 different sized D-Rings to wrap around the beam and tie off your line through both D rings
- 6 ft. standard lengths available. Longer sizes are available by special order

98-20 \$52.00



Fall Prevention Harnesses are key to the safety of access workers. When sized and worn properly (and attached to approved systems), they will break the fall of a worker and save his life. OSHA requires that workers wear full-body harnesses, and that they are regularly inspected and replaced; a worn-out harness may fail when it's needed the most. Contact your local OSHA office for more details.

#### **Sky Genie Versa-Lite Full Body Harness**

- Lightweight and quick connect hardware for easy on and off use
- · Friction buckle shoulders and quick release leg straps
- · Adjustable shoulder, leg and chest straps w/back and front D-ring
- Seat support pads

96-213 \$85.00 96-214 \$85.00 \$85.00 96-215 96-217 \$90.00

#### **Harness Pads**

Can be used with Lifesaver and Versa-Lite harnesses, 2/pkg. 96-208 \$24.00



#### Chair 21CC

- 12 x 24 in. Birch plywood Seat board
- · Rounded corners to prevent snags
- · Heavy duty webbing to wrap around protection
- 2 bucket clips
- Tool loop

92-221 \$185.00



#### **Sky Genie Cylinder**

One of the industry standards, this tried and true descender has a great safety reputation and is easy to use.

- Rope wraps around the shaft and passes through the device
- Decelerate or Stop descent and remain suspended by applying pressure to free end of line
- Lock in one position by looping free end of line over top
- Preset rate of descent by number of turns around the shaft. Few turns for rapid descent, more for slower rates. Descent speed MUST be controlled by user.
- 1/2 in. rope
- · Weight 1.3 lbs. 93-214 \$210.00



#### 18 in. Lanyard with Loops

Shock absorbing lanyard, no snaps, each end finished with soft, reinforced loop total overall length of 18 inches.

96-2221 \$41.00



# **Safety Ropes**



#### Braided "Safety Core" 1/2 in.

Construction: -Blue colored nylon core with a polyester and polypropylene white cover provides easy detection of abrasions and wear.

Tensile Strength: 6,500 lbs., Used for: Descenders & Rope Grabs

- Very resistant to abrasion
- Colored nylon core quickly exposes wear and abrasion
- · Non-rotating construction cannot be backturned or hockled
- Soft and flexible, yet extremely durable

300 ft. 90-153 \$275.50 600 ft. 90-155 \$548.25 1,200 ft. 90-156 \$1,058.25





#### Safety Core "Hi-Vee" 1/2 in.

Construction: Blue colored nylon core with a polyester and polypropylene orange and white cover provides easy detection of abrasions and wear.

Tensile Strength: 6,300 lbs., Used for: Descenders and Rope Grabs

- Protective finish added to further minimizes abrasion and maximize rope life
- Flexible & durable enough for use with many descent devices and rope grabs
- Hi-Vee means High-Visibility: Bright color identifies it as safety line
- Colored nylon core quickly exposes wear and abrasion
- Non-rotating construction cannot be

backturned or hockled

300 ft. **90-163** \$346.25 600 ft. **90-164** \$648.50 1,200 ft. **90-165** \$1,271.75



#### KM III Static Kernmantle Rope 1/2 in. & 7/16 in.

Construction: Continuous filament Polyester core braided over a Nylon Core, white with a blue tracer.

Tensile Strength: 1/2 in. - 8,200 lbs., 7/16 in. - 7,500 lbs., Used for: Descenders & Rope Grabs

- Improved abrasion, chemical and UV resistance
- Low stretch, non-rotating and easy to knot with low moisture absorption
- Flexible and durable enough for use with many descent devices and rope grabs

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1/2 in 300 ft.	90-136	\$323.00
1/2 in 600 ft.	90-142	\$625.00
7/16 in 300 ft.	90-113	\$270.00
7/16 in 600 ft.	90-115	\$530.00
7/16 in 1.200 ft.	90-116	\$1.040.00

Call for available colors.





#### KM III Max 7/16 in.

Construction: Tightly woven polyester cover over a nylon core. Black with gold tracer

Tensile Strength: 7,900 lbs., Used for: Descenders and

Rope Grabs

- Greater abrasion resistance than KM III
- Flexible and durable enough for use with many descent devices and rope grabs.
- · Chemical and UV resistance
- Non-rotating and easy to knot with low moisture absorption

300 ft. 90-122 \$317.50 600 ft. 90-123 \$627.50 1,200 ft. 90-1235 \$1,308.00





#### Multi Line II "Safety Line" 5/8 in.

Construction: Three Strand polyester composite fiber

Tensile: 8200lbs, used for safety lines, tie offs

- Easy handling, flexible, and strong multipurpose line.
- Polyolefin keeps line diameter up without adding weight.
- Very little water absorption
- . Multiline II will not break down from UV exposure
- Soft, spun polyester is added to the surface for better grip and chafe protection

300 ft. **90-181** \$255.00 600 ft. **90-182** \$460.00



See Rope Safety on pg. 3



#### Platinum® 7/16 in. Rope

Platinum® stands for an entirely new breed of patent pending rope safety ropes made with cutting edge technology.

It is characterized by the permanent mechanical interconnection between the rope's core and it's cover. Core and cover yarns are interlaced with one another at regular intervals, which keeps any core/cover displacement from happening. These interconnection sites effectively stop any bunching of the cover and core. Thus, the PLATINUM® rope enables the excellent transmission of forces from the cover to the core region and, in this way, prevents any overloading of the cover.

Tensile Strength: 7400 lbs Used for Descenders and rope grabs

- . New and innovative braiding technology
- Permanent mechanical connection between core and cover between individual cores.
- Greater safety, longer service life, more flexibility, and better handling.
- Polyamide core and cover
- · Robust in resisting extreme abrasive forces

300 ft. **90-1311 \$390.00** 590 ft. **90-1312 \$750.00** 



# **Walking the Roof**

#### **DBI Sala Self-Retracting Lanvard**

- Sealed design keeps the working components free of dirt. grease, water.
- · Built-in carrying handle makes anchoring safe and easy also provides a secondary "dropped objects protection" attachment point
- · Pivoting anchor handle stays in line with load for added
- · Anti-ratcheting brake stops falls within inches and limits arresting forces to 900 lbs
- · Locking swivel hook with impact indicator provides a visual means of inspection
- i-Safe Intelligent Safety System is built into every unit to track inspections
- Meets OSHA and ANSI requirements

#### **Self-Retracting 30 ft. Lanyard**

• 30 ft. of 3 /16 in. wire rope

Galvanized Wire 97-960 \$1,495.00 97-961 \$2.850.00 Stainless Wire

#### Self-Retracting 50 ft. Lanyard

• 50 ft. of 3 /16 in. wire rope

Galvanized Wire 97-964 \$1,765.00 Stainless Wire 97-965 \$1,995.00

#### **DBI Sala Sealed Self-Retracting Lanyard w/Winch**

- Stainless steel and cast aluminum housing for corrosion resistance
- 50 ft. 3 /16 in. SS steel wire rope for durability (50, 85 and 130ft. lengths in galvanized or stainless steel are available)
- Built-in retrieval winch for raising/lowering load during emergencies with built-in shock absorbing capabilities, fall arrest works in capabilities in retrieval mode for added safety
- Input crank handle brake prevents movement of the load if accidentally released during raising/lowering
- · Self-adjusting disc brake for reliability
- · Self-locking swivel snap hook with impact indicator
- · Meets or exceeds all applicable industry standards including OSHA, ANSI and the stringent ANSI Z 359

#### Self-Retracting 30 ft. Lanyard w/Winch

• 50 ft. of 3 /16 in. SS wire rope

Stainless Wire & Winch 97-962 \$3,195.00

#### Self-Retracting 50 ft. Lanyard w/Winch

• 50 ft. of 3 /16 in. SS wire rope

Stainless Wire & Winch 97-966 \$3,445.00

#### Self-Retracting 50 ft. Lanyard w/Winch & Bracket

· Quick-mount bracket enables user to attach to a DBI / SALA Support structures with ease and carrying bag

Stainless Wire w/Winch & Bracket \$3.995.00 97-967

#### **Adjustable Mast**

- Variable Offset Davit support 11.5in to 27.5in mast extension
- Anchor Point Height carries from 78in to 88in high
- Compatible with Hitch Mount Sleeve
- Variable Offset Masts can be equipped with front mounted and/or back mounted winches
- Rated as a 5,000 lb. anchorage point for OSHA & ANSI Z359.1

• Weight: 13.0 lbs (5.9 kg) 99-911 \$2,775.00



#### **Freestanding Counterweight Anchor**

- Non penetrating design does not attach to working surface
- · Built-in shock absorbing post provides added safety to user
- Fall arrest and restraint rated for one (1) worker for jobsite versatility
- Approved for use on concrete, single-ply membrane, bitumen membrane, asphalt sanded & asphalt stone chippings roof types
- Ideal for use on flat surfaces up to a maximum of 5 degrees slope/pitch
- Counterweights are 45 lbs (20.3 kg) and come with an integral carrying handle for easy transport and set up
- Rated as 5,000lb Anchorage Point; OSHA and ANSI Z359.1
- · Weight: 720 lbs

99-905 \$3,001.50

#### **Door/Window Jamb Anchor**

- Fits door or window sizes from 21-1/2 to 51-1/2 in. width
- D-ring made of carbon steel with zinc-plated finish
- Non-penetrating anchor rated for fall protection
- Fast and easy installation with built-in adjustment knob-no tools or drilling required
- Light weight and portable design for easy storage and use
- · Anchor is simply compressed between the vertical sides of the door or window
- Rated for 3,600 lbs
- Meets or exceeds all applicable industry standards including **OSHA and ANSI Z359**
- Weight: 14 lbs 99-902 \$585.00

#### **Anchorage Connector Portable/Reusable**

- A safe anchor point is established when inserted into a 3/4 in. diameter hole in cured concrete with a compression strength of at least 3,000 psi (20.7 MPa)
- Can be removed and re-installed in a new location
- Can be used for vertical or overhead/ceiling surface applications
- . Often used for anchoring scaffolding to building
- · Constructed of stainless steel, aluminum for a long service life
- · Color-coded to differentiate fall protection use per OSHA regulations
- 3/4 in. hole diameter
- 5.000 lb. ultimate strength
- · Single user connection; 400 lbs. maximum capacity \$175.00

#### **Reusable/Disposable Roof Anchors**

OSHA allows for no fall restraint or protection during the act of installing a roof anchor. Nail these to structural roof members.

Reusable 99-302 \$22.00 Disposable 99-301 \$5.20

#### **Hitch Mount Sleeve for Vehicle**

- Designed to install into a 2 in. hitch receiver on an attendant vehicle to provide a stable anchor point for fall arrest systems
- Can be used a mast up to a maximum 29 in.
- Includes zinc-plated steel hitch mount sleeve and powdercoated aluminum stabilizer T-bar
- Rated to 450 lb. working load
- Rated as 5,000 lb. Anchorage Point; OSHA & ANSI Z359.1
- Easy to set up no tools required
- Weight: 57 lbs 99-910 \$1,275.00









## **Ropes & Rope Care**



The life of a climbing rope depends greatly on its use, damage and on care, cleaning, and storage. Climbing rope should be stored, preferably after drying, at room temperature, ideally in a storage bag. Climbing ropes should be washed occasionally by hand in cold water with a mild soap, rinsed free of the soap, and then spread out or hung up to dry in the air. Avoid direct sunlight, do not use a dryer, and do not place the rope above a heat source.

> These sharp miniature rocks can actually cut and damage rope. Keep your rope out of the dirt.

> > SkyGenie





#### **Sky Genie Descent Rope** (1/2 in.)

Construction: 18 braids of nylon fiber for maximum strength Tensile Strength: 5,000 lbs.

Recommended for Sky Genie Descender

- High Temperature with Shock absorbing elasticity
- Preformed eve at each end with a length of abrasion protection
- Each line stamped with serial number and assembly date

100 ft.	90-21	\$170.00
150 ft.	90-22	\$199.00
200 ft.	90-23	\$250.00
250 ft.	90-24	\$285.00
300 ft.	90-25	\$365.00
350 ft.	90-26	\$395.00
400 ft.	90-27	\$445.00
600 ft.	90-29	\$675.00



#### **Rope Cutter**

Fusing rope ends helps to protect your rope and prevent unraveling after you cut your rope. This table top model operates on 110 volts AC and features a red "on" light.

Electric Hot Knife 91-635 \$174.00 2 in. Hot Knife Blades 91-636



#### Whip-End Dip

Seal your rope ends to prevent fraying and add a color-coding option to your gear with this waterbased liquid vinyl compound sealant. Made in USA.

Clear 91-631 \$10.00 Red 91-632 \$10.00 White 91-633 \$10.00



#### **Solid Braided Nylon Rope** 1/2 in.

Construction: Solid braided nylon Tensile Strength: 6,100 lbs., Used for: Descenders Rope Grabs

· High tenacity fibers of quality nylon tightly woven to give top notch performance

300 ft. **90-310** \$155.00 600 ft. 90-311 \$262.00



#### **Shrink Tube**

Protect rope ends. Write your own information on the ID tags and slip between shrink tube and rope. Apply hot air or infrared heat source, and clear tubing shrinks tightly around rope and tag.

3/4 in. Shrink Tube (1 ft.) 91-629 \$0.95



#### Cevian Unicore 7/16 in. Rope

Cevian Unicore® static rope represents a new standard in technology and safety that will redefine the definition of a "Work Horse" rope. Robust, UV resistant polyester sheath protects a static nylon fiber core that is bonded together by the Unicore® process. Eliminating sheath slippage and allowing for safe escape should the rope become damaged during use.

300 ft. **90-704** \$290.00 600 ft. **90-705** \$575.00



#### **Rope ID Tags**

Provide important information such as when a rope is put into service, ID, etc. Write your own information on the ID tags and slip between shrink tube and rope.

60 pk. **91-630 \$36.00** 



#### **Sky Genie Canvas Storage Bags**

Canvas storage bags for rope and equipment.

Up to 400 ft. 91-207 \$80.00 Up to 600 ft. 91-208 \$98.00 91-204 \$134.50 Equipment Bag





# **Rope Protectors**

### **Sky Genie Rope Protector**

- Attach cord to secure to your line for desired position
- · Protect you line against cutting or abrasions
- 18 inches in length

91-221 \$25.25



#### **PMI Supermantle Rope Protectors**

- · Heavy-duty padded ballistic black canvas
- Tie-on cord allows you to position it anywhere along the line
- Full 18 in. Velcro closure keeps it snug and closed
- Fits onto any diameter rope

91-32 \$29.00 91-33 \$31.00 91-31 \$47.00



#### **Rope Wrapper**

- •18 inches in length
- Ultra tough, multi-layer canvas duck cloth, the rope
- Velcro® fastener allows quick placement and removal
- · Grommet is used to secure it with an accessory cord (supplied with the Rope Wrapper).

91-518 \$28.00



#### **Protect Me Rope Protector**

- · Protects your ropes and worker's safety
- Velcro closure to secure your line
- 23 inches in length

\$32.00 91-41

### **SMC Rope Tracker**

- · Multi-channel design for optimized flexibility & versatility
- Guarded channels for rope protection up to 1/2 in.
- · Multiple, independent attachment points
- 90° articulation

98-537 \$69.00



#### **Rescue Tech Rope Guard**

Designed to protect ropes from abrasion when stretched across rough surfaces encountered in rappelling, rescue, high rise building maintenance, and other operations. Webbing loops are attached at each end to provide tiebacks to secure rope quard.

91-03 \$30.00 91-04 \$32.00

91-05 \$39.00



#### Sky Genie Tie-Off Pad

- Use as an anchor point when tying off to a beam, girder, or rooftop structure
- Support at least 5,000 lbs.
- · Strong Nylon webbing with 2 different sized D-Rings to wrap around the beam and tie off your line through both D rings
- 6 ft. standard lengths available. Longer sizes are available by special order

98-20 \$52.00



#### Gemtor 6 ft. Tie-Off Pad

This anchor sling provides an OSHA-compliant anchor point when attached to a structural support capable of supporting at least 5,000 lbs. The anchor slings are made of 1 3/4" wide nylon webbing with a 3" wide wear pad to protect against abrasion. This choker-type sling has one standard size, snaphook-compatible D-ring that passes through a larger D-ring (connection is made to the standard D-ring).

6 ft. 98-51 \$40.00 98-52 \$45.00



Bird Barrier offers safety training classes for high rise rope access work and residential fall prevention. Classes are offered as mixed groups and in private, and are taught by an industry-leading safety instructor. Attendees will take an exam and receive a certificate if they pass. Prices quoted based on travel and other particulars. Call for more information.



## **Fall Harnesses**



#### **Sky Genie Lifesaver Full Body Harness**

- · Lightweight and guick connect hardware for easy on and off use
- Friction buckle shoulders and quick release leg straps
- · Adjustable shoulder & leg straps w/center back D-ring
- · Rappel straps provide extra support for use with seat boards and rescue equipment.
- Seat support pads
- New York state approved

S	96-209	\$134.00
Μ	96-210	\$134.00
L	96-211	\$134.00
XL	96-212	\$134.00





### **Sky Genie 22C6 Harness**

- · Lightweight full body harness
- 1-3/4 inch webbing
- 6000 lb tensile strength
- · Center back D-ring with all friction buckles.

L 96-221 \$79.00



#### **Sky Genie Versa-Lite Full Body Harness**

- · Lightweight & quick connect hardware for easy on/off use
- Friction buckle shoulders & guick release leg straps
- · Adjustable shoulder, leg and chest straps with back and front D-ring
- Seat support pads

0	90-213	φοσ.υυ
Μ	96-214	\$85.00
L	96-215	\$85.00
XL	96-217	\$90.00



SkyGenie



#### **DBI/Sala ExoFit™ Harness**

- Incorporates a breathable Dri-Lex® lining that immediately draws moisture away from the body keeping the worker dry and comfortable all day long
- Ergonomic design incorporates built-in shoulder, hip and leg padding
- The industry's first and only one-handed quick connect buckles
- Wrap around no-tangle design slips on like a vest
- Patented cross-over design provides added comfort and versatility with an adjustable front D-ring
- . Back D-ring for connection to fall protection system
- Adjustable non-slip chest strap w/quick connect buckle
- · Torso buckles adjust easily, yet hold the straps firmly in place and complete the 5-point adjustment system
- Coated hardware for corrosion resistance

000100	
96-902	\$280.00
96-903	\$280.00
96-904	\$280.00
	96-902 96-903



#### **DBI/Sala Delta™ II Crossover Harness**

- Delta No-Tangle design for added comfort and easy donning
- · Spring loaded stand-up back D-ring ensures fast, easy, and safe connections
- · Patented cross-over design provides added comfort and versatility with an adjustable front D-ring
- · Side D-rings for work positioning
- Parachute buckles on lower shoulder straps for quick and easy adjustment
- · Pass-thru buckle leg straps for fast & easy donning
- Polyester webbing construction for added durability
- Plated hardware for corrosion resistance
- 96-921 \$140.00 96-922 \$140.00



#### Miller Stretchable Duraflex® Harness

- · Designed for comfort and easy movement
- Synthetic nylon, polyester elastic webbing in the leg and shoulder straps
- · Extremely rugged and durable
- · Bright color for easy visibility

\$227.00 96-332 96-331 \$227.00 96-333 \$227.00





#### **Gemtor Lightweight Harness #922**

- · Lightweight sub-pelvic polyester full body harness
- · Chest strap retainers with snap hook holder
- Quick connect leg and chest straps
- Spring-loaded shoulder straps
- New York State Approval #9593

96-51 \$83.00



### **Gemtor Front D-Ring Harness #933**

- · Lightweight, sub-pelvic, polyester full body harness
- · Quick connect buckles on leg straps and at hip
- · Full-size front and back D-ring 96-52 \$86.00





### **Heavy Rescue Universal Harness**

Well suited for rescue, fire rescue, military, industrial, confined space and commercial applications where a Class III harness is required including dorsal D-ring. This full body harness combines the fall arrest protection needed in a Class III harness with the comfort of a waist level rappel point. D rings on top of the shoulders allow the use of a spreader bar system for industrial use. 96-933 \$285.00



#### **Libery Mountain Technic Harness**

A fully adjustable, full body harness for work positioning and fall-arrest. Padded hip belt and leg loops for comfort. Available in Easy-Lock buckle or Speed buckles. NFPA version includes Speed buckles and all steel components and attachment points.

96-616 \$143.00 ΧI 96-617 \$143.00



#### **Petzl Avao Bod Harness**

- The X-shaped dorsal construction wraps to reduce pressure points during prolonged suspension.
- · Facilitates carrying and organization of tools with multiple equipment loops and retainers for attaching tool holders and pouches.
- · Allows the user to hang from the dorsal attachment point for a longer time in case of a fall.

96-443 \$395.00 I -XI 96-444 \$395.00 XL-XXL 96-445 \$395.00



**Chairs** 

The bosun's chair derived its name from the olden days of saling ships; the Boatswain (or Bosun) was the petty officer on a merchant ship responsible for maintenance and related work; he was the most likely to ride a chair up the mast to work on the rig. Bosun's chairs are still used on sailboats today. They are also a key element in chair access work. The Window Cleaner sits on the chair and lowers himself down a building to clean the windows. The chairs can come with hooks for tools and buckets, padding and safety belts. A fall-protection harness must be worn at all times.

#### **Chair with Waist Harness**

- 12 x 24 in. Birch plywood Seat board
- Rounded corners to prevent snags
- · Heavy Duty webbing to wrap around protection
- 2 bucket clips

92-221 \$182.00



#### **Padded Chair**

- · Padded cushion for comfort
- 12 x 24 in. Birch plywood Seat board
- Rounded corners to prevent snags
- Heavy Duty webbing to wrap around protection
- 3 bucket hooks
- · 2 loop holders

92-222 \$280.00



#### **4-Point Chair**

- 12 x 24 in. Birch plywood Seat board
- Rounded corners to prevent snags
- Heavy Duty webbing to wrap around protection
- 2 bucket hooks
- Tool loop

\$199.00 92-223



### 4-Point Padded Chair

- · Padded cushion for comfort
- 12 x 24 in. Birch plywood Seat board
- · Rounded corners to prevent snags
- Heavy duty webbing to wrap around protection
- 3 bucket hooks
- · 2 loop holders

92-224 \$299.00



#### Renlacement Parts

Hopiadomoi		
A] Padded Belt	92-201	\$89.00
B] Seat Pad	92-202	\$110.00
C] Bucket Clips	92-203	\$2.95
D] Bucket Hook	92-205	\$8.95
E] Tool Loop	92-206	\$4.95



#### MIO 4-Point Chair w/Waist Belt, **Back Support & Padded Seat**

MIO Bosun's Chair designed for use with full body harness with front and back D-rings. This 4-Point suspension Bosun's Chair are laminated with plastic on both sides for additional durability. A 12 x 24 in. suspended work

platform. Equipped with:

- Padded Seat
- Adjustable Back Support
- Bucket Clips
- Tool Holders

92-143 \$265.00

#### **DBI Sala 4-Point Chair w/Cushion**

- Seat board (12 x 24 x 1 in.) w/cushion for added support and comfort
- Integrated side snaps to hang equipment or tools
- 1-3/4 in. wide latex treated polyester webbing construction for added durability
- · Cadmium plated alloy steel hardware for strength and corrosion resistance
- Meets or exceeds all applicable industry standards including OSHA and ANSI

\$315.00

#### **Harken Power Seat**

The unique Harken PowerSeat™ has revolutionized working at height, providing the worker with the ability to ascend quickly, stay in position longer, and work in comfort. The electrical motor supplies power during the ascent, start and stop is an electrical system and the control system is provvided with an anti-panic system and an emergency button. During descent, the engine is switched off and the operator uses the lever to open the rope grab and allow the rope to slide round the drum in a controlled descent.

95-505 \$7,080.00









## **Rack Descenders**



Rappel Racks control the rate of descent by varying amount of friction through the number of bars and changing spacing between those bars. Bars are easily replaceable. Recommended ropes: KM III and Safety-Core

WARNING - An independently anchored safety line with a Rope Grab, Lanyard and Harness is required when working with this equipment. Consult your OSHA office for details.

#### **MIO 4-Bar Rack System**

S.S. Long Bar No Groove

Equipped with 3/8 in. stainless steel rack frame

• 1 in. diameter aluminum Brake Bars (for extra friction)

Rack Unly	93-1042	\$67.00	
Rack w/Alum. Bars	93-104	\$138.00	
Rack w/S.S. Bars	93-1041	\$168.00	
Short Alum. Bar w/Slot	93-110	\$14.00	
Short Alum. Bar w/o Slot	93-111	\$14.00	
Long Alum. Bar w/Groove +Pin	93-112	\$18.00	
Long Alum. Bar w/Groove, No Pin	93-1121	\$18.00	
Long Alum. Bar w/o Groove	93-113	\$19.00	M
S.S. Short Bar w/Slot	93-115	\$24.00	M
S.S. Short Bar No Slot	93-116	\$24.00	M10 Meck
S.S. Long Bar w/Groove	93-117	\$29.00	Corpora

93-118



#### **MIO Rack-Type Descender**

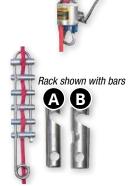
The rack and bar systems allow the user to control rate of descent by varying the amount of friction by changing spacing between bars and changing the number of bars being used.

S.S. Rack w/BreakLever 93-108 \$325.00

#### **Bluewater Rappel Rack**

The most popular configuration is one grooved and four regular bars for the 11 inch rack and one grooved and five regular bars for the 14 inch rack.

14 in. Rack Only	93-86	\$45.00
A] Brake Bar	93-87	\$5.00
RI Grooved Bar	93-88	\$7.50



## **Long Rack Frame**

The **SMC Long Rappel Rack Frame** is an excellent choice for building your own personalized Rappel Rack. To give you a head start we have put together three of the most popular configurations (93-407, 93-408, 93-409). You can also build your own by just adding brake and tie-off bars and you're ready to go.

\$28.00

The rack is available in two eye configurations: conventional (93-405) or with the eye twisted 90 degrees (93-4050).

SMC Aluminum brake bars are available with straight or angled slot and with or without a "training" groove. Aluminum bars are lighter, less costly, and provide greater levels of friction.

SMC Stainless steel brake bars are available as U-shaped or tubular style and with or without a "training" groove. Stainless Steel bars are more durable, handle additional heat better, allow for a smoother/faster rappel, and help keep ropes "cleaner" and lasting longer.

Tie-Off bars provide added friction/control and facilitate quick and easy lock-off of rope to maintain position and/or hold a load. Bars with the "training" groove are used as 1st or 2nd bar to help keep ropes aligned properly. Bars with an angled slot are designed to "snap" onto rack frame for more secure placement and bars with straight slot are designed for added safety so that the rack may not be loaded backwards.



# Rappel Rack with 6 Stainless Steel Bars

93-407 \$122.00

Rappel Rack Frame Only Stianless Steel 93-405 \$52.50

Bar Brake Top 7/8 in. Alum. w/Groove 93-401 \$12.00

Bar Brake 3/4 in. S.S. w/Angled Slot 93-404 \$12.00



93-408 \$109.00

Rappel Rack Frame with 90° Eye
Stianless Steel 93-4050 \$52.50

Bar Brake 7/8 in. Alum. w/Angle Slot 93-402 \$10.00

Bar Brake 3/4 in. S.S. w/Angled Slot & Groove 93-4041 \$12.00

These brake bars are interchangeable.



93-409 \$119.00

Bar Brake Top 7/8 in. S.S. w/Groove 93-400 \$59.00

Bar Brake 7/8 in. Alum. w/Straight Slot, Blue 93-403 \$11.00

Bar Brake Top 1 in. S.S. w/Tie-Off Pin 93-406 \$36.00





**Descenders** 

Descenders allow the operator to slowly descend down a properly-anchored rope in a controlled manner. There are two basic types of Descenders: Cylinder and Rack Systems. When using Cylinders, the rope wraps around a shaft, it slides around the shaft and gently lowers the worker. Rack Systems feature at least four parallel bars that the rope is woven through; these bars slide up and down the bracket and cause resistance, like the shaft on the cylinders. Racks also offer a controlled descent, Lately, newer models with brakes have also been introduced.

#### **Sky Genie Cylinder**

One of the industry standards, this tried and true descender has a great safety reputation and is easy to use.

- Rope wraps around the shaft and passes through the device
- Decelerate or Stop descent and remain suspended by applying pressure to free end of line
- Lock in one position by looping free end of line over top
- · Preset rate of descent by number of turns around the shaft. Few turns for rapid descent, more for slower rates. Descent speed MUST be controlled by user.
- 1/2 in. rope
- Weight 1.3 lbs

A) Rope wrapped around steel shank B) Cover over rope and shank

C) Rope locked in place by wrapping around the top of the Descender



#### CAUTION! SAFETY WARNING

The SKY GENIE DESCENT SYSTEM has been designed, tested and engineered for use with a specific line, the L4 nylon line manufactured by the Sky Genie factory. Critical tolerances of quality, careful inspection by trained factory personnel, and use of the finest fibers create a line which is matched to the 14G-0 Sky Genie cylinder.

The use of other "look alike" line with the Sky Genie cylinder can create hazardous situations on the job and leave a worker inadequately protected.

In addition to perhaps not meeting O.S.H.A. standards, the use of any line other than the L4 type, manufactured by Sky Genie will void any express or implied warranties for this product. Any modification or alteration of Sky Genie line or equipment can result in an unsafe working condition.

#### **Video Training**

- Learn how to use the Sky Genie Descender
- Learn about rope care

Free with Sky Genie Cylinder 79-10

#### **Rope Rider Descender**

- Certified by UL to meet ANSI/ASSE Z359.1, ANSI/ASSE A10.32
- Pulli down on the sleeve to descend slowly and smoothly
- Ideal work and rescue tool; rated for 2-person descent
- Immediate hands-free braking feature: to stop, let go; unit also features secondary panic brake
- Aircraft-grade Aluminum alloy construction for strength/endurance
- Solid connection eye
- Used with 1/2 or 7/16 in. Kernmantle rope
- Weight 1.5 lbs 93-61 \$410.00

#### The Petzl I'D

A rope descender with a brake that engages in the event the worker lets go of the controlling arm during the descent. · Pull back on handle with one hand and control the rope with

- the other hand
- Self-braking device, can be locked for hands free work
- Use with double braided kernmantle ropes
- Weight: 1.2 lbs

**A)** 1/2 in. Rope (red) \$252.00 **B)** 7/16 in. Rope (gold) 93-50 \$252.00



### **Figure 8 Descender**

One of the most popular full-sized descenders used by professionals throughout the rescue, fire service, and police/tactical markets. Machined from 1/2 in. thick, solid aluminum, heat-treated bar and then finished with a very tough, hard-anodized finish in either grey or black. The carabiner hole functions effectively as a sticht plate for 1/2 in. rope, although this configuration does not provide sufficient friction when used with smaller diameter rope.

\$58.00 93-410

#### **Fisk Descender**

- . Designed for durability, thermal capacity & smooth flow
- · Gentle flow for 19" of working line to pass through the
- · Large radius for smoother descent. Less wear to the working line.
- Reduction in rope hockling and torsional twist. Durable 304 stainless steel construction

\$239.00 93-82

#### **Miller Descent Device**

- Apply slight outward pressure on the free end of line. Descends faster or slower; decelerating and stopping by; and locking in a stationary position for a hands-free work environment
- Pre grooved track guides on 1/2 in. braided line through the cylinder
- Large tie-off finger allows easy rope locking.
- · Speed depends on the number of times line is wrapped around the mandrel
- 1/2 in. rope
- Weight 1.65 lbs

93-301 \$295.00





#### **MIO Rope Descender with Lever Brake Control**

- Wrap rope around the center shaft and then through the braking mechanism.
- · Lever Break control mechanism allows the operator to vary speed and brake at any time.
- 7/16 and 1/2 in. Approved Rope
- Weight 3 lbs

93-101 \$302.00

### **NoWorries Double Stop 7/16 in. SRTE Descender**

Reversible descent control device that connects to the users harness and is designed to regulate friction and control the descent when a climber is descending on an anchored rope.

93-80 \$302.00



Connects to the users harness and is designed to regulate friction and control the descent when a climber is descending on an anchored rope. 93-81 \$217.00





# **Anti-Panic Rope Grabs**



Rope Grabs are a critical piece of the safety equation. They are locked to an independently anchored safety rope; and then attach directly to the worker's safety harness via a lanyard. Rope Grabs are intended to be pulled up the rope, but lock in place when they move downwards.

The ANSI Z359 Fall Protection Code introduced in 2007 was approved by the American National Standards Institute to address fall protection requirements for General Industry. One of the five Standards approved and becoming effective on November 24, 2007 was the ANSI Z359.1 – 2007 Safety Requirements for Personal Fall Arrest Systems, Subsystems and Components. This Standard as well as the ANSI/IWCA I-14.1 - Window Cleaning Safety Standard include some key changes and requirements for rope grabs.

#### ANSI Z359

3.2.6 Fall Arrester Component.

3.2.6.3 Fall arresters shall be automatic in their locking (fall stopping) function. The possibility of overriding the self-locking feature of the fall arrester shall be guarded against. Fall arresters, which are designed to work on vertical lifelines and which rely solely on the lever principle for locking, shall be designed such that locking will become effective

**before the lever becomes perpendicular to the lifeline.** Systems incorporating knot type fall arresters are excluded from this standard.

E3.2.6.3 The intent of guarding against overriding of the self-locking feature of the fall arrester during use is to reduce the possibility that the device may be deactivated if reflexively grabbed or held during onset of a fall. Knots are not predictable or testable over the given lifetime of the lifeline.

#### **IWCA I-14.1 - Window Cleaning Safety Standard**

9.7.2 Personal Fall Arrest System

(b) In addition to complying with ANSI Z359.1, rope grabs used for fall arrest shall include by design, an anti panic stop feature.

(g) Personal fall arrest systems, when stopping a fall shall:1) limit maximum arresting force on an employee to 1250 pounds (8 kN) when used with a body harness;

2) be rigged such that an employee can neither free fall more than 6 feet (1800 mm), nor contact any lower level;

3) bring an employee to a complete stop and limit maximum deceleration travel distance of an employee to 42 inches (1067 mm);

#### Kong 7/16 in. to 1/2 in. Rope Grab

- For use on 7/16 in. to 1/2 in. rope that follows the operator in both directions
- Moves up or down along the rope w/o manual intervention
- Easy to install and remove at any point on the rope
- Toothless cam configuration
- No exterior lever to grab and disable the device from grabbing
- Park Feature allows you to use the grab in both self trailing mode and a positioning device
- Meets ANSI Z359.1-2007 and OSHA requirements in North America 94-910 \$165.00

#### Petzl ASAP 7/16 - 1/2 in. Rope Grab

- · Locks even if grabbed during a fall
- · Works on vertical or angled rope
- Moves up or down along the rope w/o manual intervention
- Easy to install & remove at any point on the rope 94-52 \$215.00

#### MIO 7/16 in. Anti-Panic Rope Grab with Lanyard

- Durable light weight stainless steel
- · Complete with 3 ft. shock-absorbing lanyard
- Self trailing and will automatically lock in place in case of fall
- Energy absorbing
- · Easy to attach or remove at any point on line
- ID Color: Gold
- Meets OSHA/ANSI requirements
- •Anti-Panic design compliant: IWCA I-14, 1-2001

Recommended Rope: 7/16 in. KM III Static Kernmantle, KM III Max.

#### MIO 1/2 in. Anti-Panic Rope Grab with Lanvard

- · Durable lightweight stainless steel
- · Complete with 3 ft. shock-absorbing lanyard
- Self trailing, automatically locks in place in case of fall
- Energy-absorbing
- Easy to attach or remove at any point on line
- ID Color: Blue
- Meets OSHA/ANSI requirements
- •Anti-Panic design compliant: IWCA I-14, 1-2001

Recommended Rope: 1/2 in. KM III Static Kernmantle, Safety Core, Hi-Vee 94-118 \$163.00

### Stopfor 1/2 in. Rope Grab with 1 ft. Lanyard

- Rotating side plates
- Captive lock system via carabiner attachment
- Rollover cam braking system minimizes wear
- Easy on/off on Kernmantle rope
- Meets ANSI Z359.1-2007 and ANSI/IWCA I-14.1-2001
   94-931 \$194.00

#### MIO 5/8 in. Anti-Panic Rope Grab with Lanyard

- · Durable light weight stainless steel
- · Complete with 3 ft. shock-absorbing lanyard
- Self trailing, automatically locks in place in case of fall
- Energy-absorbing
- Easy to attach or remove at any point on line
- ID Color: Blue
- Meets OSHA/ANSI requirements
- Anti-Panic design compliant: IWCA I-14, 1-2001
   Recommended Rope: 5/8 in. KM III Static Kernmantle, Safety

Core, Hi-Vee

94-123 \$163.00

#### Miller 5/8 in. Stainless Anti-Panic Rope Grab

- For 5/8 in. diameter rope
- Anti-panic design prevents accidental disengagement of locking mechanism
- Easy to attach and detach
- Easy to move up and down vertical line
- NYS approved #9374

94-321 \$235.00

#### **Komet 5/8 in. Stainless Anti-Panic Rope Grab**

- For 5/8 in. diameter rope
- Anti-panic design prevents accidental disengagement of locking mechanism
- Self-trailing; will automatically lock onto rope and stop a fall
- · Easy to attach and detach
- Large attachment ring

Recommended Rope: 5/8 in. Multiline II

94-61 \$145.00





# **Standard Rope Grabs**

#### MIO 7/16 in. Rope Grab with Lanyard

- · Durable light weight stainless steel
- · Complete with 3 ft. shock-absorbing lanyard
- · Self trailing and will automatically lock in place incase of fall
- Energy absorbing
- · Easy to attach or remove at any point on line
- . ID Color: Gold

Recommended Rope: 7/16 in. KM III Static Kernmantle, KM III Max.

94-111 \$163.00



- Durable light weight stainless steel
- · Complete with 3 ft. shock-absorbing lanyard
- · Self trailing, automatically locks in place in case of fa
- Energy-absorbing
- · Easy to attach or remove at any point on line
- ID Color: Blue

Recommended Rope: 1/2 in. KM III Static Kernmantle, Safety Core, Hi-Vee

94-117 \$163.00



#### Gemtor 5/8 in. Rope Grab with 3 ft. Lanyard

- Stainless steel for superior corrosion resistance
- Energy-absorbing
- · Attach, detach and position at any point on vertical line
- ID Color: Red

 NY approved #9502-Rope Grab only Recommended Rope: Multi Line II.

94-51 \$145.00



## **Lanyards**

#### Sky Genie 3 ft. Shock-Absorbing Lanyard

Sky Genie 4 ft. Shock-Absorbing Lanyard

New ultra-light design, this soft landing lanyard features two locking snap hooks made from space age alloys, offering reduced weight while meeting strength requirements. Light weight appeals to workers sense of comfort while sturdy construction offers safety on the job.

Soft Landing<sup>™</sup> combines a specially-designed energy-dissipating

core and a rugged outer jacket to cushion the shock and recoil of

a fall more effectively than any conventional lanyard. Features a

warning system that appears after its core has been subjected to

the force of a fall. This system is designed to prevent the reuse.

96-224 \$68.00

4 ft. **96-2242 \$68.00** 





### **DBI Sala 3 ft. EZStop® Lanyard**

- 1 in. polyester webbing for durability and longevity
- · Limits arresting forces to 900 lbs. or less
- Meets or exceeds OSHA, ANSI, stringent ANSI 7359 standards

2.5-6' EZStop Retrax 97-906





A unique build-in shock absorbing system greatly reduces shock in a fall.

 Equipped with a warning flat that pops out after excessive force has been exerted and warns you not to re-use the lanyard.

• Two double-locking snap hooks to prevent roll-out

97-392 \$106.00 97-393 \$106.00 97-3941 \$110.00



### Sky Genie 6 ft. Shock-Absorbing Lanyard

This lanyard has 2 double-locking snaps. Lightweight & sturdy. 96-225 \$81.00



#### Sky Genie 16 in. Short Lanyard

Highly visible 1 in. wide webbing with ultra-light double locking snap hooks.

. These short lanyards keep the rope grab within reach for easier control.

96-222 \$76.00



#### Sky Genie 18 in. Lanyard with Loops

Shock-absorbing lanyard, no snaps, each end finished with soft, reinforced loop.

96-2221 \$41.00



#### **Gemtor Shock-Absorbing Lanyard**

Conforms to OSHA requirements for fall arrest when used in conjunction with a conforming body harness.

- · Built-in energy-absorbing feature
- Two forged double locking snap hooks

97-503 \$60.00 97-504 \$60.00 97-506 \$62.00



#### Sky Genie 24 in. Lanyard with Snap Hooks

Shock-absorbing lanyard, double lock snap at each end, with an overall length 24 inches.

96-2222 \$76.00



## **Carabiners**



The ANSI Z359 Fall Protection Code introduced in 2007 was approved by the American National Standards Institute to address fall protection requirements for General Industry. One of the five Standards approved and becoming effective on November 24, 2007 was the ANSI Z359.1 - 2007 Safety Requirements for Personal Fall Arrest Systems, Subsystems and Components. This Standard includes a few key changes and additions for carabiners.

- Tensile loads that a carabiner must withstand remain the same as the existing. Standard - 5,000 lbs. (22.2kN)
- · Gate face strength requirements have changed from 220 lbs (1kN) to 3,600 lbs (16kN).
- Side of gate strength requirements have changed from 350 lbs. (1.55kN)(old Standard) to 3,600 lbs.(new Standard).
- Minor axis strength of carabiners must be 3,600 lbs. (16kN). This is new to the Standard.
- OSHA has been stepping up their inspections and enforcement of connectors used in the field. Meeting the standard insures your current equipment is compliant.
- The following carabiners were specifically made to meet or exceed the ANSI Z359 standard.

### **Oval Shaped Steel Carabiner**

- 6,750 lbs. breaking strength
- 3/4 in. gate opening
- 4.94 oz.

98-801 \$37.00

#### **ANSI Lite Steel Carabiner**

- 7,000 lbs. breaking strength
- 1 in. gate opening
- 8.9 oz.

98-524 \$33.00

#### ANSI AutoLock XL Steel Carabiner

- 10,000 breaking strength
- 7/8 in. gate opening
- 8 oz.

98-210 \$46.00

#### **ANSI Crossover Dual Lock Alum. Carabiner**

- 9,000 lbs. minimum breaking strength
- 1.05 in. gate opening
- 5.5 oz.

98-525 \$38.00

#### **ANSI Auto-Locking Lg. Steel Carabiner**

- 10,341 lbs. minimum breaking strength
- 1.14 in, gate opening
- 11.3 oz.

98-522 \$56.00

#### **ANSI Ovalone Triple Lock Steel Carabiner Kong**

- 9.000 lbs. minimum breaking strength
- 0.75 in. gate opening
- 7.75 oz.

98-920 \$27.00

#### **ANSI Ovalone Twist Lock Steel Carabiner Kong**

- 9,000 minimum breaking strength
- 0.75 in. gate opening
- 7.75 oz.

98-921 \$26.50



















### **ANSI Oval Twist Lock Carabiner**

- 6,700 lbs. minimum breaking strength
- 0.79 in. gate opening
- 6.9 oz.

98-802 \$23.00



#### **ANSI Oval Triple Lock Carabiner**

- 6,700 lbs. minimum breaking strength
- . 0.79 in. gate opening
- 7 oz.

98-803 \$24.00



#### **ANSI Large D Twist Lock Carabiner**

- 11,200 lbs. minimum breaking strength
- 0.86 in. gate opening
- 9 oz.

98-805 \$24.00



#### **ANSI Modified D Triple Lock Carabiner**

- 11,200 lbs. minimum breaking strength
- 0.86 in. gate opening
- 9.1 oz.

98-806 \$26.00



#### **ANSI Large D Twist Lock Carabiner**

- 11,900 lbs. minimum breaking strength
- 0.98 in. gate opening
- 10.5 oz.

98-808 \$26.00



#### **ANSI Large D Triple Lock Carabiner**

- 11,900 lbs. minimum breaking strength
- . 0.98 in. gate opening
- 10.7 oz.

98-809 \$30.00



#### **ANSI X-Large Steel Triple Lock Steel Carabiner Kong**

- 11,200 minimum breaking strength
- 1.02 in. gate opening
- 8.45 oz.

98-922 \$23.50



### **ANSI X-Large Steel Twist Lock Steel Carabiner Kong**

- 11,200 minimum breaking strength
- 1.02 in. gate opening
- 8.45 oz.

98-923 \$23.00





All-Vac suction cups allow high rise window cleaners to do their job more effectively. Window cleaners working from a bosun's chair use suction cups to provide a stable firm position which is needed so they can apply sufficient pressure to clean the window. The stability provided by the suction cups promotes safety for window cleaners. They provide window cleaners with the hand hold needed to effectively and ergonomically clean a window. By doing so, the suction cup helps inhibit fatigue and provides for a safer work process.

In the 35 years that All-Vac Industries has been making suction Cups, the company has consistently worked with the window washing industry to improve their products' effectiveness and quality. Now, more than ever, All-Vac's Suction Cups are made to stand up to the harsh environment presented by window cleaning. Some units are also useful for home and storefront work for removing and installing windows.



#### **Suction Cups w/Regular Fittings**

Suction Cups provide safety, versatility, and ease to a multitude of materials handling applications. Whether you need to lift, move, grab, secure or hold non-porous materials, our handoperated vacuum lifters and suction cup grabbers will make your job easier. They work great on glass, steel, aluminum, sheet metal, plastic sheet, polished stone, fiberglass, raised floor tiles, auto panels, sealed wood, ceramic tiles and much more.

4 in. Double Complete (up to 50 lbs.)	98-401	\$45.00
5 in. Single Complete (up to 35 lbs.)	98-403	\$38.00
5 in. Double Complete (up to 75 lbs.)	98-405	\$50.00

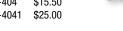
#### **Suction Cups w/Stainless Fittings**

Featuring stainless steel fittings molded into the suction cups and stainless steel springs in the release valve assembly. Along with thicker zinc plating on other small metal parts, these improvements will reduce and inhibit rust from occurring inside the fittings and valve assemblies; which will allow the suction cups to last longer.

98-4011	\$60.00
98-4031	\$46.00
98-4051	\$64.00
	98-4031



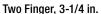
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Trigger Single	98-406	\$9.00
Trigger Double	98-407	\$13.50
4 in. Replacement (1)	98-402	\$13.00
4 in. SS Replacement	98-4021	\$22.00
5 in. Replacement (1)	98-404	\$15.50
5 in. SS Replacement	98-4041	\$25.00





One Finger, 2-1/4 in.

Can be used as rings on your fingers for positioning Recommended lifting capacity: 4 lbs. 98-4071 \$1.50



1" diameter finger rings. Recommended lifting capacity: 10 lbs. Two Finger, 3-1/4 in. 98-408 \$4.00



Four finger style for super gripping action, with easy release tabs. Recommended lifting capacity: 12 lbs.

Two Finger, 4-5/8 in. 98-409



#### **Pump-Style Suction Cups**

Combines a lightweight ABS plunger with a durable metal handle and a flat suction cup. The result is a reliable and economical lifter for handling smooth nonporous flat material such as glass, metal, stone, tile and cultured marble products. It is sold with a plastic protective carrying case. Weight capacity: 123 lbs. 98-415 \$89.00



### **Heavy Duty**

#### 8 in. Heavy Duty Vacuum Cup

Woods Powr-Grip

- Steel and Aluminum handle
- 8 in. rubber contact surface w/125 lbs. holding capacity
- Pump the handle to lock onto glass
- · Release by a small, protected lever
- Complete with protective carrying case
- Not recommended to use as an anchoring point \$113.00





#### **CMI Ultrascenders**

- · For rugged use and exceptional strength
- · Large model features a molded handgrip for extra comfort,

• Both share simple one-handed operation on and off the rope

Extruded and machined bodies with stainless steel parts

- · Sold in pairs
- Breaking Strength: 5,000+ lbs

Right & Left 95-202 \$187.25 Right 95-203 \$91.00 95-204 \$91.00 Left



#### **Petzl Ascenders**

For use with 7/16 or 1/2 in. lines

- Provides a firm grip for climbing
- Comfortable elastomer grip provides thermal insulation
- Available in either Black (left hand) or Gold (right hand)
- Sold individually

Black (L) 95-101 \$81.00 Gold (R) 95-102



## **Tool Bungees**

#### **Safety Curl Bungee**

Secure your tool from falling with this unique



design with two easy to use snap hooks. 55-210 \$25.00



Never again will you have to watch your squeegee or other tool crash to the ground.

- · Triple thick heavy duty connector ring fasteners
- · Connect one end to your tool, other end to a chair, harness etc
- Swivel connector reduces twisting or binding
- · Corrosion resistant materials

55-21 \$16.25



#### **Nylon Safety Cord**

The mechanism is same as Towa curl safety cord, made from a very tuff nylon and special stainless steel spring that can hold much heavier items like electric drill and impact driver.

\$11.25 55-211



### **Barricades**

#### **Safety Cone Barricade System**

Protect your job site with these eye-catching cones. Bright yellow chain attaches easily from cone to cone.

- · Square foot rugged 36 in. yellow cones
- Printed "Danger People Working Above"
- Easy to stack when not in use, only one square ft.
- 12" base fits easily on stairs

The best defense from accidents is a good offense.

Safety Cones (ea.) 77-13 \$40.00 Set of 5 Cones & 40 ft. of Chain 77-11 \$240.00

#### **Yellow Safety Chain**

- 2 in. yellow lightweight plastic chain
- 20 ft. in length

77-12 \$30.00 Save \$19.20 on 6+



### **Barricade Tape**

- Roll of 3 in. yellow tape 1,000 feet in length
- Printed in black lettering "Caution Men Working Overhead"
- Indoor/Outdoor use

One Roll 77-51 \$20.00 Save \$20.25 on 10+



• 9 lb. ring weight 77-15 \$36.00





# **Roof Securing Devices**



MIO Mechanical Corporation

The MIO-250 Aluminum Portable Roof Rigs are the toughest and most versatile roof rigs available. The complete line of MIO roof rigs consist of a three dimensional triangular configuration allowing the entire rig to support the load. All stress points of the roof rig are trussed and welded for extra strength and support.

The lower stabilization beams can be easily dis-engaged and re-attached in seconds to move the rig over vent pipes or other roof top obstructions. Stainless steel quick connect pins are included for faster assembly. MIO roof rigs can be disassembled and transported through standard roof hatch openings.

#### **MIO Portable Roof Rigs**

Quick Name	mini 2x4	midi 2x6	maxi 2x8	midi 3x6	maxi 3x8
Specifications					
Outreach (inches)	24	24	24	36	36
Length from Front Wheels to Back Wheels (ft.)	4	6	8	6	8
Counterweights (LBS.)	504	336	252	504	378
Number of 42 pound weights	12	8	6	12	9
Unit Weights (lbs.)	130	150	145	173	156
Safety Factor Counterbalance	4:1	4:1	4:1	4:1	4:1
Height from Anchor Point to Ground (Eyebolt)	52	65	80	71	86
Inside Parapet WII Clearance (inches)	43	55	70	55	70
12" Diameter Rubber Pneumatic Wheels	6	4	4	6	4
Part Number	99-124	99-126	99-128	99-136	99-138
Price Each	\$3,360.00	\$3,360.00	\$3,360.00	\$3,835.00	\$3,835.00

(Material: All are Aluminum Except as noted)

NOTE: Prices are FOB shipping point, Philadelphia, PA.



#### **SMC Roof Roller**

Specialized edge protection designed for right angle structural edges. Optimum placement of the two 4 in. rollers keeps rope away from the edge to maintain rope strength and system efficiency. 98-536 \$318.00



#### **MIO Tie Back Anchor**

- Easy to attach to the parapet for support
- · Lightweight and adjustable to fit walls with a thickness of up to 24 in.
- · Heavy duty steel construction
- Weight: 40 lbs. 99-100 \$695.00



#### **Towa Edge Protector**

Heavy duty aluminum bracket features foam padding to protect the building, three solid posts to guide the lines, and tie-back hole. Also prevents damage to ropes.

98-121 \$71.00



#### **MIO Termination Plates**

This plate provides a quick, reusable field termination that eliminates the need for knots and factory termination.

- Model 98-110 terminates 7/16 in. and 1/2 in. diameter double-braided or Kernmantle rope lifeline
- Model 98-111 is used to terminate 5/8 in. and 3/4 in. diameter 3-strand rope Note: Requires connecting hardware like a

tie-off pad and carabiner

7/16 in. **98-110** \$71.00 5/8 in. **98-111** \$67.00





# SAFETY TRAINING

# FOR BIRD CONTROL PROFESSIONALS







Stefan Bright is a nationally known specialist in fall protection training. He was recently presented with the American Society of Safety Engineers Triangle Award for his dedication to safety which has helped reduce accidents and fatalities in the professional window cleaning industry by over 30 percent.

Falls from elevations are the leading cause of injuries in many industries. Statistics show that most falls occur because the workers weren't properly trained in identifying the needs for fall protection. In our training course students will learn from experts in fall protection and at the end of the program, will be able to demonstrate knowledge of the following topics:

- » Fundamentals of Fall Protection
- » Why use Fall Protection
- » Site Assessment
- » Identifying Fall Hazards
- » Understanding Potential Solutions
- » Proper Selection of Fall Protection Equipment
- » Inspecting Fall Protection
- » Harness Fitting
- » Donning of Fall Protection
- Compatibility
- » Creating a Work Plan

