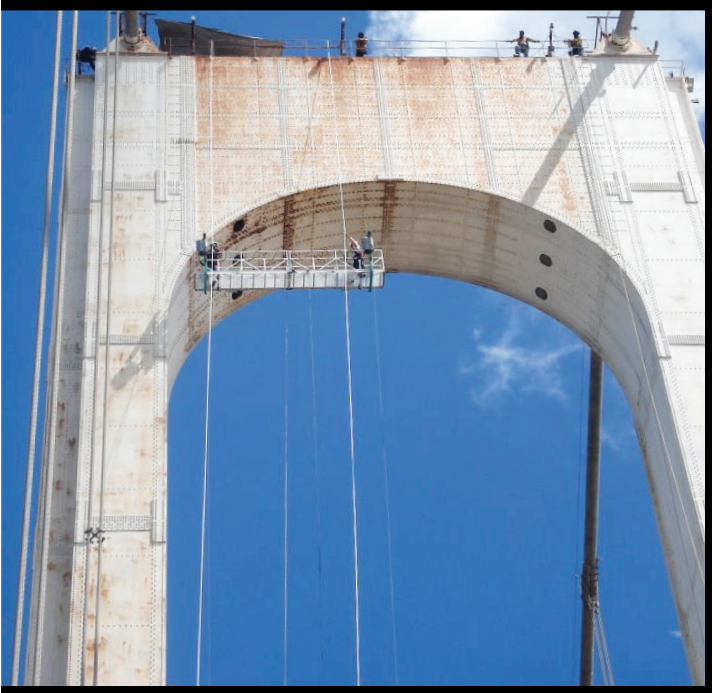
Over 70 years and stronger than ever

SOLUTIONS CATALOG

5TH EDITION

Spider®

BY BRANDSAFWAY



1-877-774-3370
www.spiderstaging.com

Table of Contents

Disclaimers

- The content contained in this catalog is for informational purposes only. For actual specifications, illustrations and information, consult the Operators Manual or a Spider professional.
- Information is subject to change.
- Not all products are available in all areas. Consult your Spider professional for availability.
- Verify product specifications for your federal, state, province or local code compliance.

About Spider

You trust Spider to provide the best powered suspended access solutions in the industry. Now our experts are part of BrandSafway, a leading provider of scaffolding, access and industrial services. As a valued Spider customer, you can now benefit from BrandSafway's broad portfolio of access and industrial services including a focus on your individual needs with local management and labor, the broadest range and largest inventory of equipment, the most comprehensive commercial and industrial services, and best-in-class safety, operating, project management and information systems. And Spider remains committed to providing the same exceptional service you already know and trust.

In an independent survey, 9 of 10 business owners ranked the reliable equipment and expertise available from Spider so superior that they are willing to put their reputation on the line to refer a friend to Spider.

That's a **trust** we take very seriously and continue to honor. Spider has invested heavily in its operations capability to continue to drive the reliable experience – whether that is a rental or service contract or your fleet investment. The best companies have great suppliers.

We strive every day to build Spider into a world-class business. Our market leadership shows in the details:

- Over 50,000 manufactured Spider hoists
- $100 million suspended access rental fleet
- Operation centers throughout the Americas
- Over 200 fully trained, accountable support people and hundreds of rigging personnel in the field
- Hundreds of service vehicles
- 24/7 technical support
- Factory trained and certified employees
- Engineering/PE stamps nationwide
- Dedicated risk management group
- Checklist-driven inspection and service processes that leave nothing to chance
- Consistent processes to smooth contractor transitions into new areas

Spider's national footprint, nationwide inventory, trained employees and consistently available professionally serviced products are the proof that these investments deliver a more reliable experience.

When a standard product will not meet special challenges, Spider's engineering team can assist you with custom solutions, backed up by aftermarket support that is the best in the business.

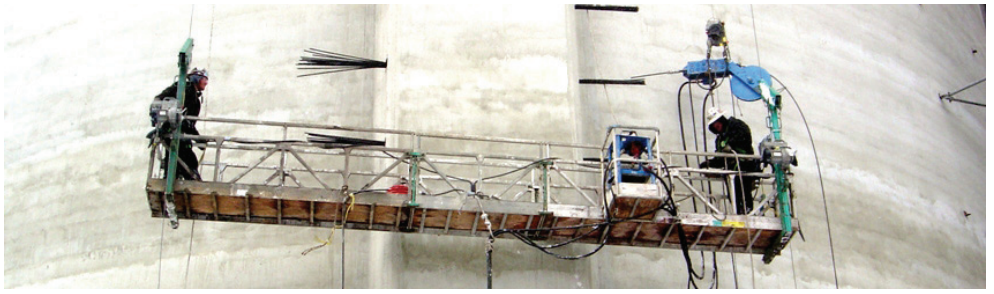
Now, what does all this mean to you? Whether a longtime customer or new to Spider, we strive to make you more productive in ways you value:

- increased uptime
- better productivity
- lower total cost of ownership
- safer operation for your employees

Call us today for your next access challenge, and while you're at it, send a friend to Spider.

Suspended Scaffolding & Rigging Solutions

As the acknowledged industry leader, Spider offers unparalleled expertise for any temporary powered access application. From high-rise commercial buildings to industrial facilities such as bridges, water towers, offshore oil platforms, wind turbine generators, dams, power plants, nuclear facilities, and countless other critical infrastructure sites, Spider is the trusted solutions supplier for safely maintaining virtually any type of structure.

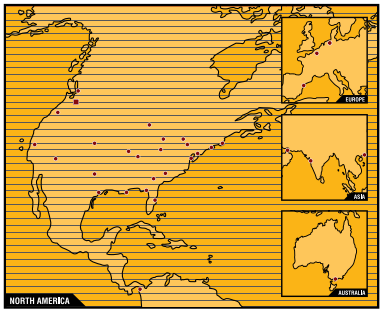


Fall Protection

Safety is inseparable from elevated work and is part of our daily lives. For over 65 years, contractors have been depending on Spider to provide solutions that work–safely and profitably. Spider is equipped with a complete line of fall protection solutions. Our products have been thoroughly tested and certified to the most rigorous standards issued by OSHA and ANSI.

Training

Every day, thousands of companies are using Spider products to get to the work. We continually respond to the needs of these customers by providing training courses to help them meet their jobsite, local, state, federal and provincial regulations. Spider has trained thousands of operators and supervisors through our accredited Competent Person Training Programs customized to commercial building as well as in our separate program targeted specifically to industrial users.



International Coverage

In addition to 22 locations in the U.S., Spider solutions are available via our locations in Antwerp, Barcelona, Dubai, Hong Kong, Melbourne, Mumbai, Panama City and Vancouver, BC.

New Products

Spider listens to what customers want.
In an effort to meet your needs, we are continually developing new products and improved features based on your input.

For our newest, most innovative product offerings, visit www.spiderstaging.com
and click on the New Products icon.

Elevator Solutions

Did you know Spider is a global leader in elevator installation access tools and accessories, leveraging 70 years of product innovation, productivity and safety based on VOC from field-level users? Spider offers differentiated rental of solutions through its unmatched branch network throughout the Americas, including:

UpPro Traction Hoists

Spider's newest traction hoist family, UpPro, maximizes productivity with capacities from 2,200 to 5,500 lbs and speeds up to 60 feet per minute. From the UpPro P2514 GHS, the highest capacity man-rated hoist in the industry, to the UpPro P1009 GHS, there is an UpPro model for every elevator application.

SafeCar 800 False Car

Spider's innovative false car offers easy installation, high travel speeds and jobsite versatility to maximize productivity during elevator installation projects. Customizable to fit in various hoistways, with minimal parts and modular construction for reduced assembly and installation time, and increased strength and durability from rectangular aluminum tubes and Ultra High Molecular Weight (UHMW) polyethylene wear pads, this is the false car of choice.

SC1500-GHS Traction Hoist

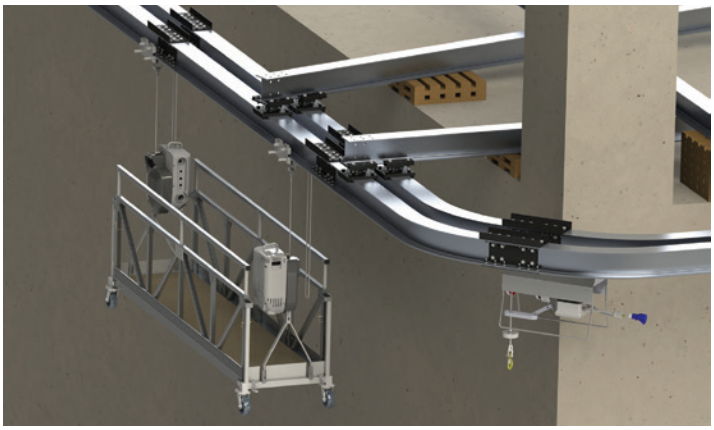
Spider's SC1500-GHS is a UL-listed, man riding, high speed traction hoist that significantly increases your productivity and safety on Guided High Speed (GHS) applications with speeds up to 70 fpm. With the best low voltage performance in its class, continuous readouts from the on-board voltage meter and easy operation with remote pendant controls, this hoist delivers performance and reliability you've come to expect from Spider's SC1500 series.

ProCut Belt Cutter

Cut elevator belts cleanly and efficiently in just five seconds with Spider's ProCut Belt Cutter. Featuring durable, robust metal components with a hardened blade and shear blocks, ProCut is easy to operate and compatible with any standard 300 ft-lb impact driver.

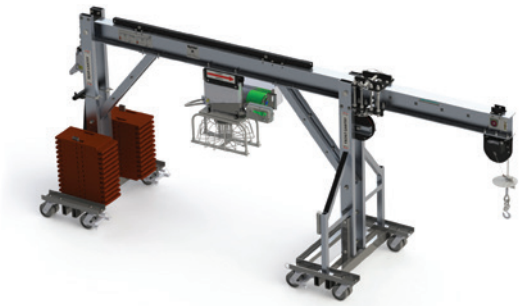
Curtain Wall Solutions

For seven decades, Spider has been providing reliable access solutions, including swingstages and Beta Max material hoists, to glazing contractors for their most demanding curtain wall installation and maintenance projects. We are excited to introduce our latest, innovative lifting solutions designed specifically for curtain wall applications:



Spider Glazier 2200

The Spider Glazier 2200 simultaneously delivers mobility, swift speeds, high lifting capacity of up to 2,000 lbs and precise curtain wall positioning to your jobsite along with optimal safety and code compliance.



Spider Dual Monorail System

Precisely position curtain wall units horizontally and vertically with Spider's Dual Monorail System - a complete solution providing continuous, horizontal mobility for swingstages and material hoists around a structure's perimeter.

The innovation continues with new offerings in Spider's temporary and permanent access product lines:

Spider Single Tieback Anchor

The Single Tieback Anchor provides a safe, economical fall protection anchorage for workers operating permanently installed powered suspended scaffolds. With a 5,000-lb ultimate load rating, 12 in. or 20 in. height options, and bolt-down or welded base plate options, the Spider Single Tieback Anchor is a cost-effective alternative to competitive tieback solutions.

Spider Knockdown Mod

The Spider Knockdown Mod is a versatile, flexible and cost-effective modular knockdown suspended platform that provides a safe, secure and stable access solution for a variety of construction, maintenance, restoration, painting and inspection projects. Lightweight and easy to transport, store and assemble, Spider Knockdown Mod is easily interchangeable with other leading products and accessories on the market.

Quality & Standardization

Quality – We invest in it. Spider products are made in our ISO 9001:2008 certified factory in Seattle.

Spider has also developed Standard Work Instructions that document the complete manufacture, inspection and repair of new and rental equipment. Standard Work means delivering the same high quality equipment, professionally prepared consistently across our 24 locations.

We train our certified technicians to these standards, test them for competence and audit for compliance. Train… test…audit. It's simply the best way to ensure our customers' productivity.

Our products are ready to get to work. Let's get started, wherever your work takes you.

Community Involvement

To us, leadership means giving back.

First, we contribute to the industry, deploying more of our experts in trade groups, industry councils and standards-writing bodies than any other manufacturer. See below for a representation of our industry affiliations.

Giving back to the community is also a high priority for Spider. Through an annual corporate campaign to support the United Way, a nationwide network that works to create lasting positive changes in local communities, Spider team members host fund-raising events and make personal contributions. Since we began this initiative, we have received the United Way's 'Best Campaign' award multiple times for our efforts.

We have a history of raising funds in response to national disasters and for veterans, as well as collecting items for local food banks. In our most recent food drive, the team at our corporate headquarters collected a record-breaking 3,600 pounds of food for Northwest Harvest, the Seattle-based non-profit food bank distributor.

Going Green

Each and every day, Spider takes steps to preserve resources and protect the environment. From online document sharing, videoconferencing, reusing packaging, and putting fewer road miles on our products and our people - it all adds up to to decrease our imprint on the environment.

What it Means for You

You may have flipped through the last few pages and wondered 'so what?' It sounds like every suspended access provider claims these same accolades. Aren't they all the same? Can't they match what Spider does?

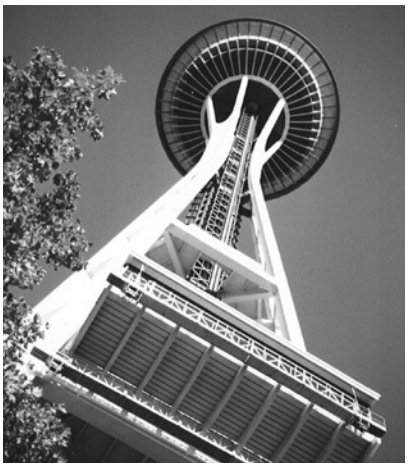
Not even close.

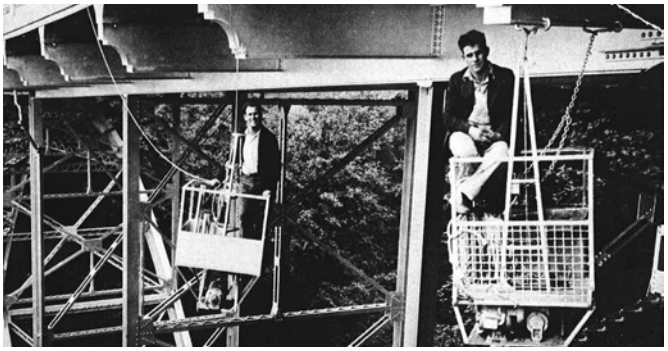
Our founders were painting contractors who needed a better way to access a 250 ft tall steel bridge over a deep ravine. They developed the original Spider basket, brought it to market and quickly launched a rental operation to bring it to contractors on a project basis in the early 1950s. Founded by contractors for contractors. That already sets up apart.

But it's not all we do. Today Spider is recognized as the leader in design, manufacture, rental and sale of suspended scaffolding solutions, boasting:

- fully integrated suspended access manufacturing and engineering teams to serve global customers.
- highly specialized design and support expertise.
- custom engineered solutions that benefit from complex local safety code expertise.
- ISO 9001: 2008 Certification
- And we invest in operational excellence to drive reliability and consistency across the Americas.

We buy our own product, we experience ownership and it drives better product decisions. When you know exactly what 'stuff' happens in the life of a product, you design it to a tougher standard. Designed for reliability and long life – those values may not matter to everyone. But they have given Spider staying power and a deeply committed loyal base of contractors for over 65 years.

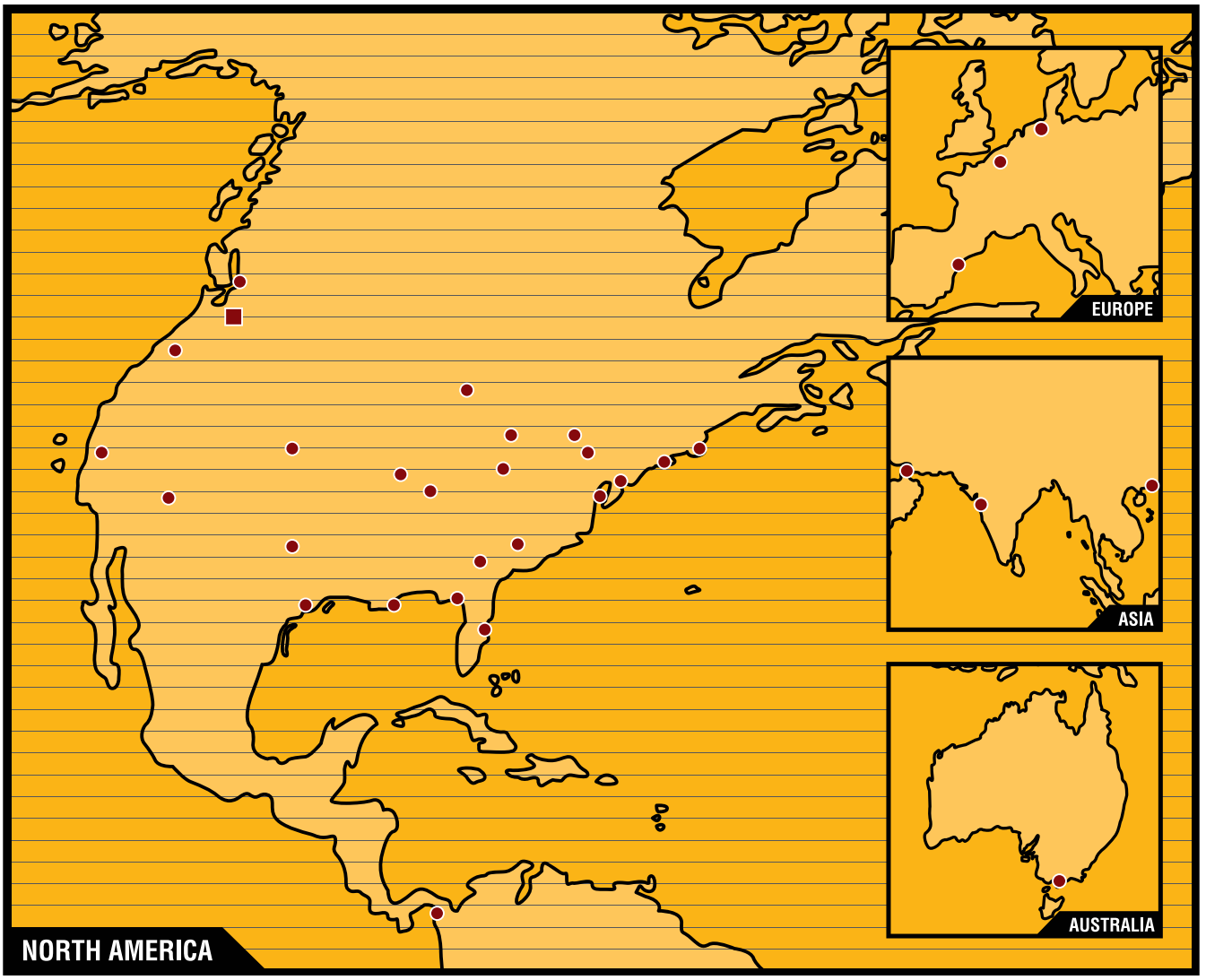




- Photos are for illustrative purposes only.
- The content contained in this catalog is for informational purposes only.

For actual specifications, illustrations and information consult the Operator's Manual or a Spider professional.

Spider Locations



World Headquarters:

Seattle

Operation Centers:

Atlanta
Boston
Charlotte
Chicago
Cleveland
Dallas
Denver
Detroit
Houston
Kansas City
Las Vegas
Louisville
Minneapolis
New Orleans
New York
Orlando
Panama City
Pensacola
Philadelphia
Portland
St Louis
San Francisco
Seattle
Vancouver, B.C.
Washington DC/Baltimore

Also:

Antwerp
Barcelona
Dubai
Hong Kong
Melbourne
Mumbai
Osterholz
Recife

Spider Operation Center Information

Spider Sales/Service/Rental Contact Information

National Toll Free 1-877-774-3370
spider@spiderstaging.com

Corporate Address
Spider
365 Upland Drive - Seattle, WA 98188

www.spiderstaging.com

Atlanta
3580 Zip Industrial Blvd SE
Atlanta, GA 30354
Phone: (770) 739-1189
Fax: (770) 739-4016

Boston
200 Libbey Industrial Parkway
Weymouth, MA 02189
Phone: (781) 335-4008
Fax: (781) 331-6623

Charlotte
5801 Orr Road
Charlotte, NC 28213
Phone: (704) 398-2003
Fax: (704) 398-0970

Chicago
625A S. IL Route 83
Elmhurst, IL 60126
Phone: (847) 455-6627
Fax: (847) 455-6667

Cleveland
5251 W. 130th Street
Cleveland, OH 44130
Phone: (216) 524-2825
Fax: (216) 524-2187

Dallas
2621 Willowbrook Road
Dallas, TX 75220
Phone: (214) 352-8400
Fax: (214) 352-8971

Denver
6300 E. 58th Avenue, Unit I
Commerce City, CO 80022
Phone: (303) 289-7737
Fax: (303) 289-7733

Detroit
22189 E. 14 Mile Road
Clinton Township, MI 48035
Phone: (734) 229-0850
Fax: (734) 229-0851

Houston
9500 W. Tidwell
Houston, TX 77041
Phone: (713) 939-9330
Fax: (713) 939-8870

Kansas City
1536 Erie Street
North Kansas City, MO 64116
Phone: (816) 474-7824
Fax: (816) 472-7824

Las Vegas
4185 W. Harmon Avenue
Las Vegas, NV 89103
Phone: (702) 856-3250
Fax: (702) 856-3252

Louisville
4341 Security Parkway, Suite 103
New Albany, IN 47150
Phone: (812) 944-5140

Miami
Phone: (954) 587-1617

Minneapolis
19725 S. Diamond Lake Rd,
Suite 170
Rogers, MN 55374
Phone: (763) 428-1730
Fax: (763) 428-1736

New Orleans
3674 US Highway 51
LaPlace, LA 70068
Phone: (504) 733-3966
Fax: (504) 733-9021

New York
25-20 Borden Avenue
Long Island, NY 11101
Phone: (718) 349-0700
Fax: (718) 326-9835

Orlando
250 National Place – 192
Longwood, FL 32750
Phone: (407) 339-0387
Fax: (407) 332-9696

Panama
Calle 4A, No. 42, Local No. 1
Panama City, Republic of Panama
Phone: (507) 224-1343
Fax: (507) 224-1344

Pensacola
3201 West Nine Mile Road
Pensacola, FL 32534
Phone: (850) 475-0028
Fax: (850) 475-1098

Philadelphia
Airport Business Complex
10 Industrial Highway, Building C
Lester, PA 19029
Phone: (610) 279-5779
Fax: (610) 279-6735

Portland
6131 N.E. 63rd Street
Vancouver, WA 98661
Phone: (503) 252-2186
Fax: (503) 252-8175

St Louis
2000 Mraz Lane
Fenton, MO 63026
Phone: (314) 644-3080
Fax: (314) 644-3682

San Francisco
2364 West Winton Avenue
Hayward, CA 94545
Phone: (650) 871-5866
Fax: (650) 871-0682

Seattle
369 Upland Drive
Seattle, WA 98188
Phone: (206) 574-0292
Fax: (206) 574-0291

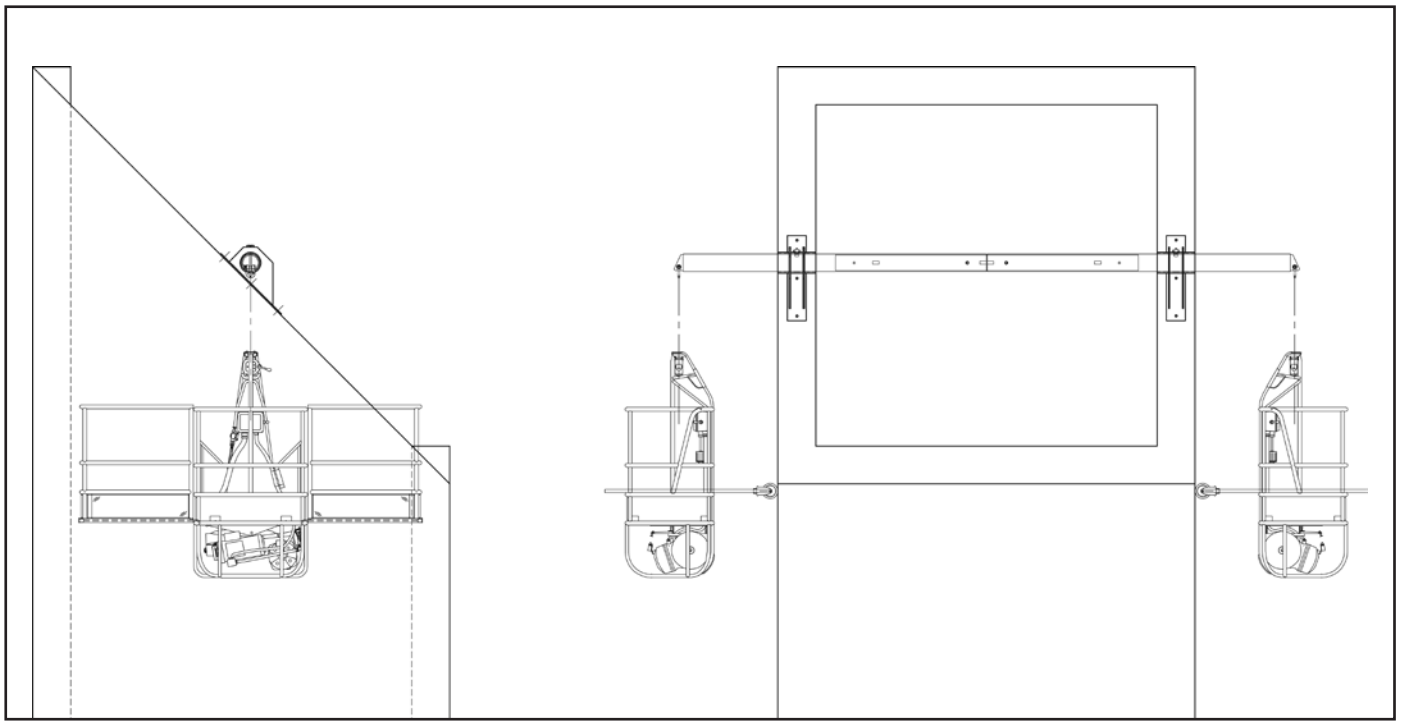
Vancouver, B.C.
Unit 160 – 13571 Verdun Place
Richmond, BC V6V 1W5
Phone: (604) 270-3728
Fax: (604) 270-0114

Washington DC/Baltimore
8300 Sherwick Court
Jessup, MD 20794
Phone: (301) 725-5499
Fax: (301) 725-7436

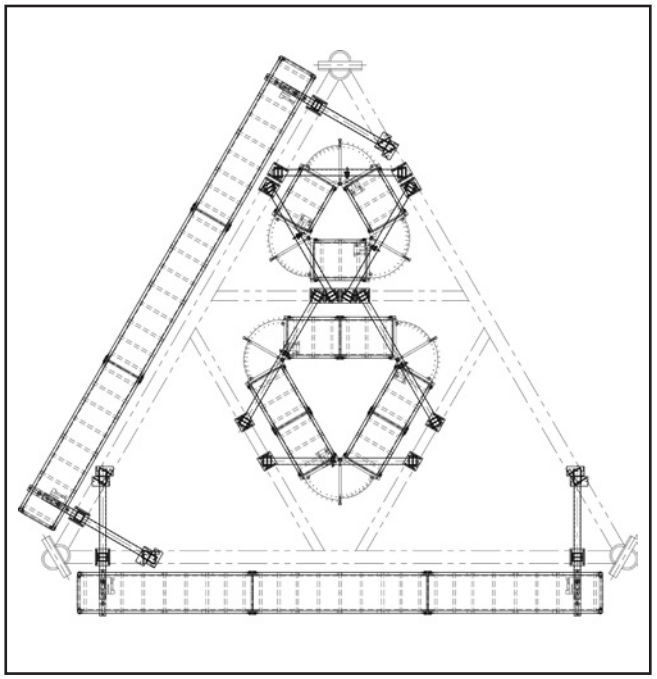
Suspended Scaffolding & Rigging Solutions

Call or click for more information
1-877-774-3370
www.spiderstaging.com

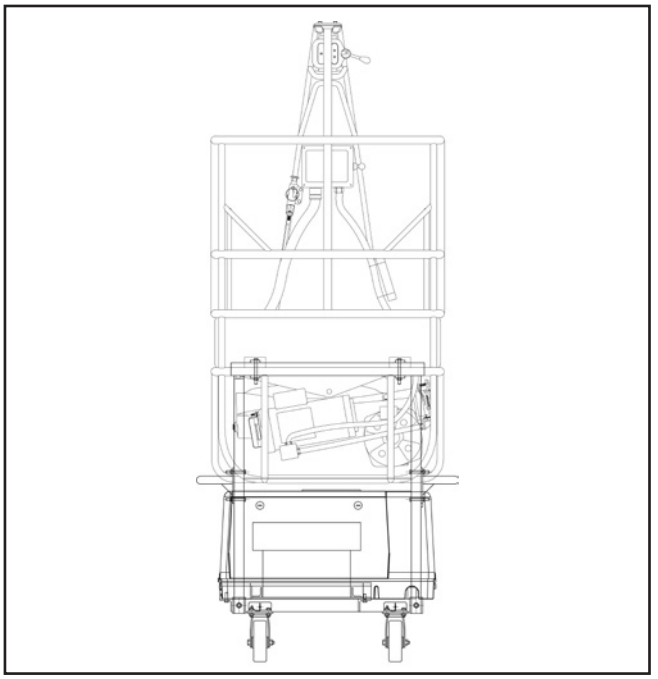
Typical Temporary Access Configurations



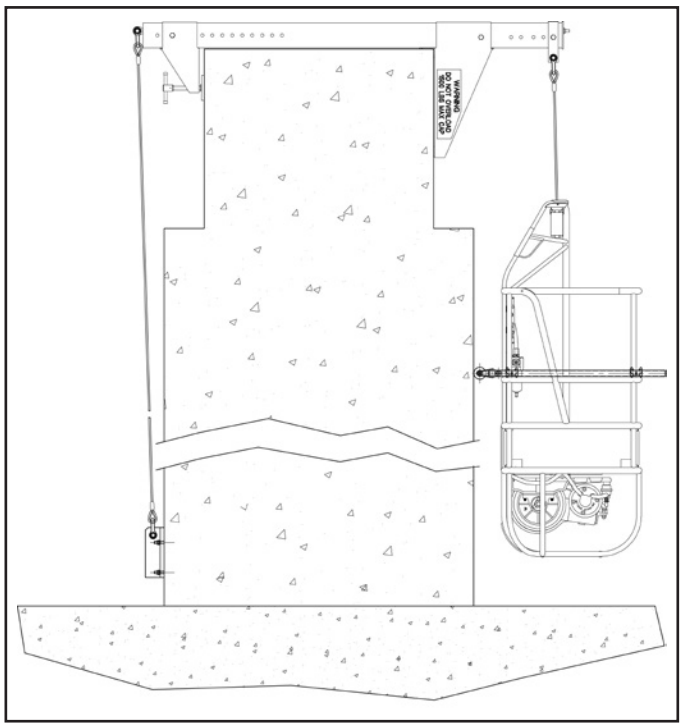
Duct rigging application on bridge



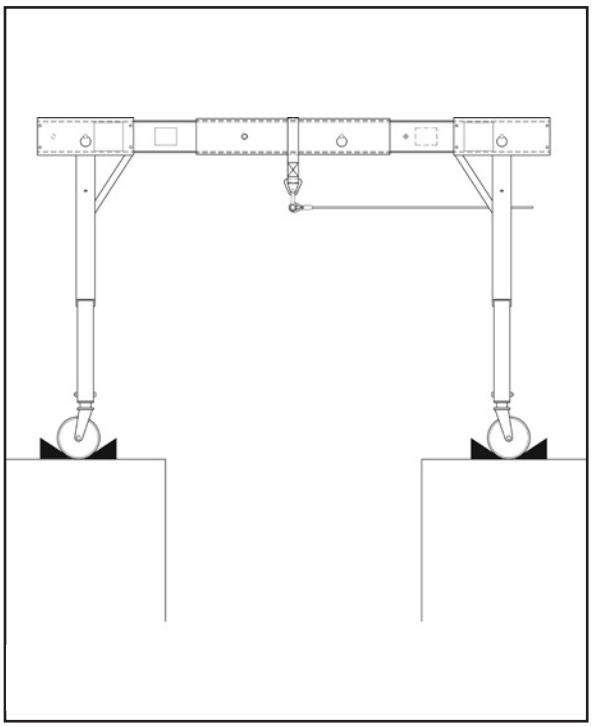
Oil rig access system



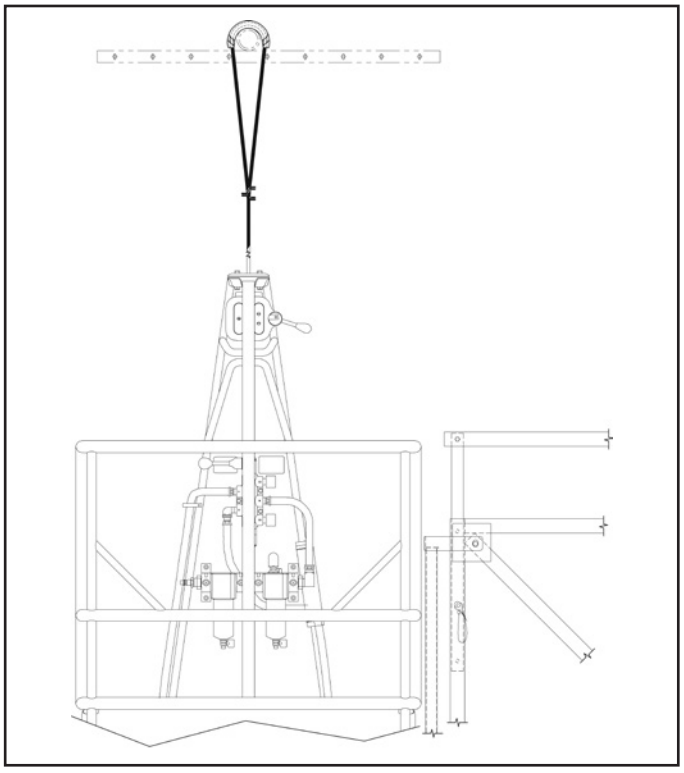
Gen-set kit for ST-180



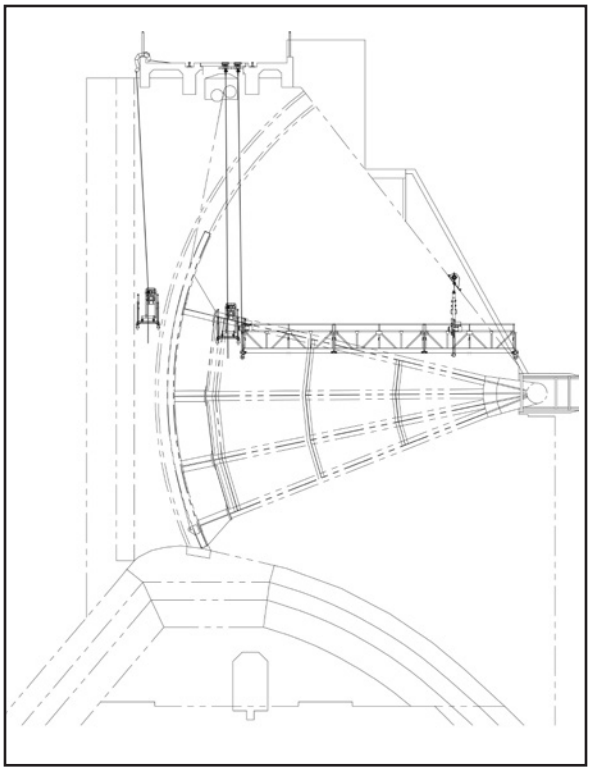
Cofferdam rigging



Rolling gantry rigging

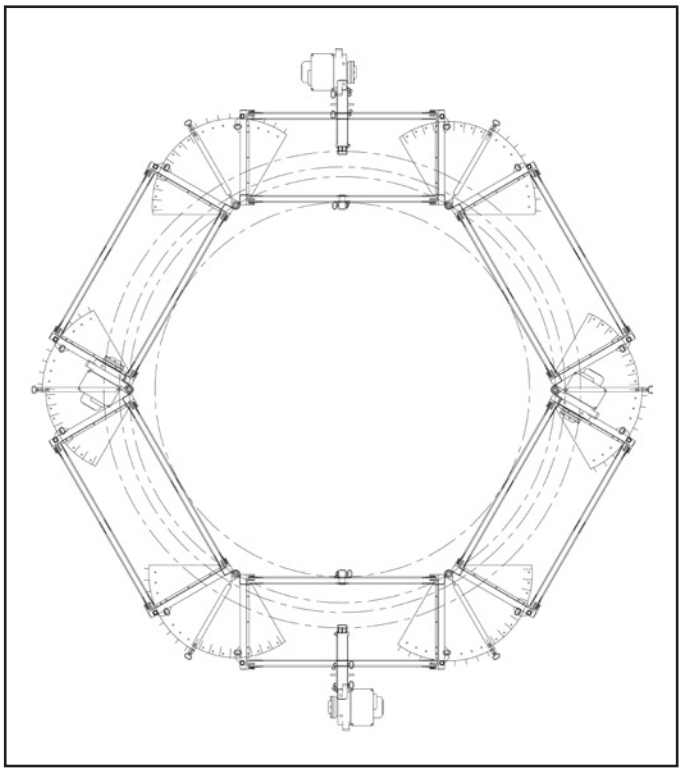


Rigging from grating

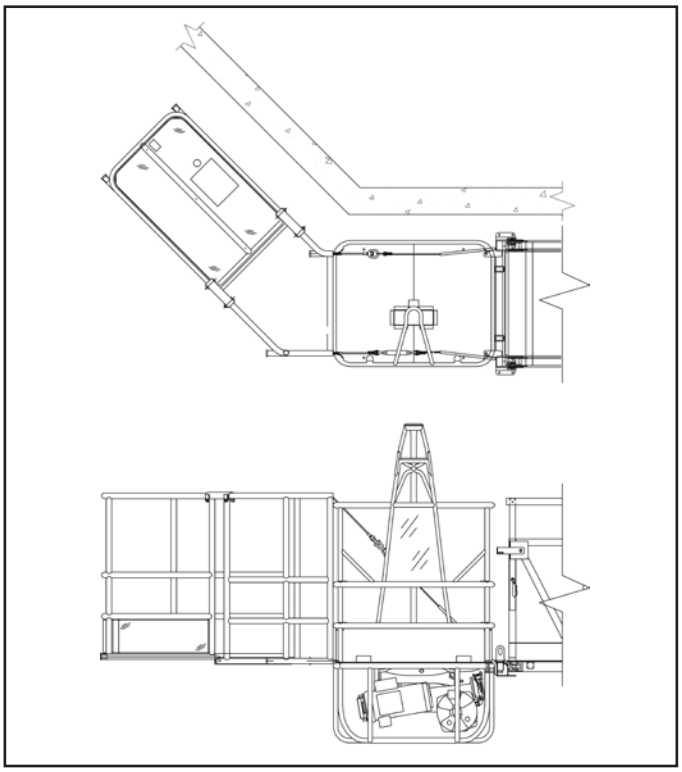


Dam gate/trunnion access

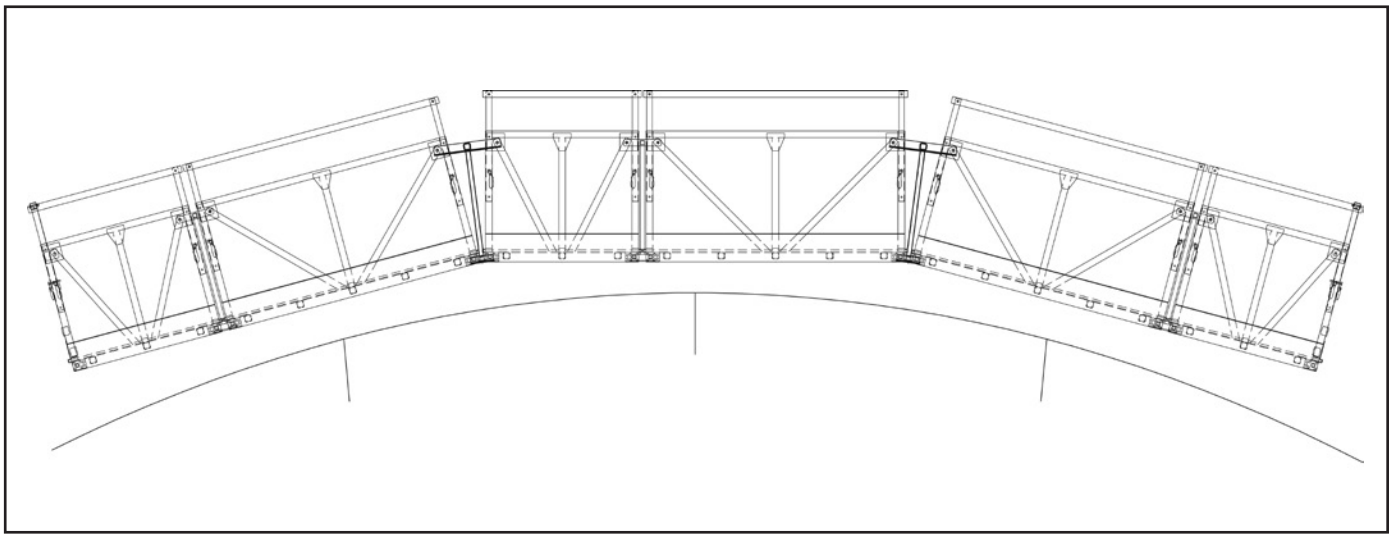
Typical Temporary Access Configurations



Circular platform

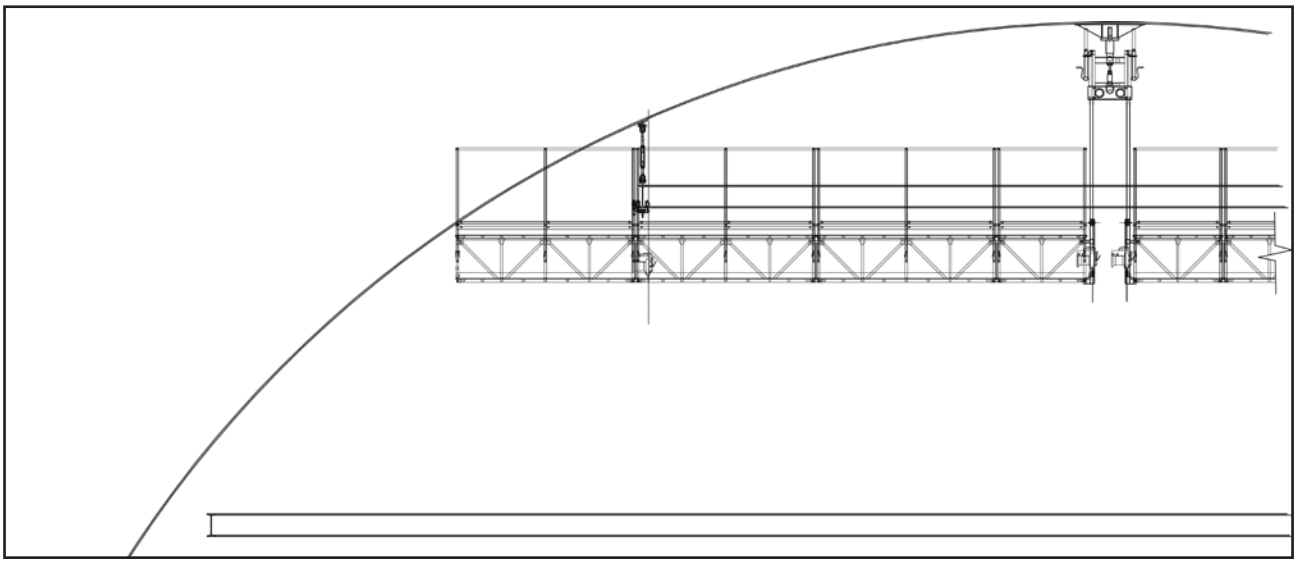


Angled flydeck extensions

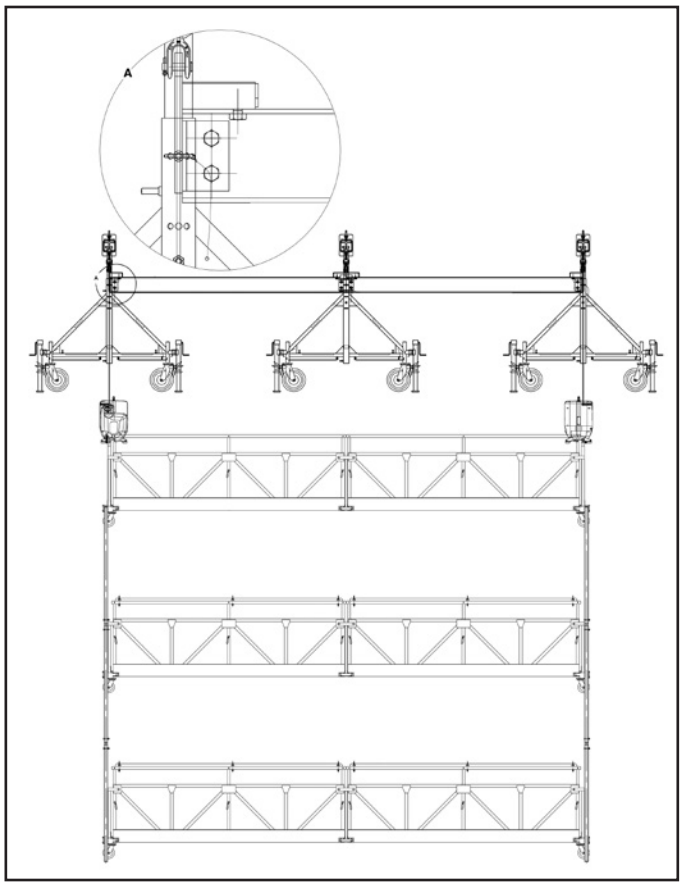


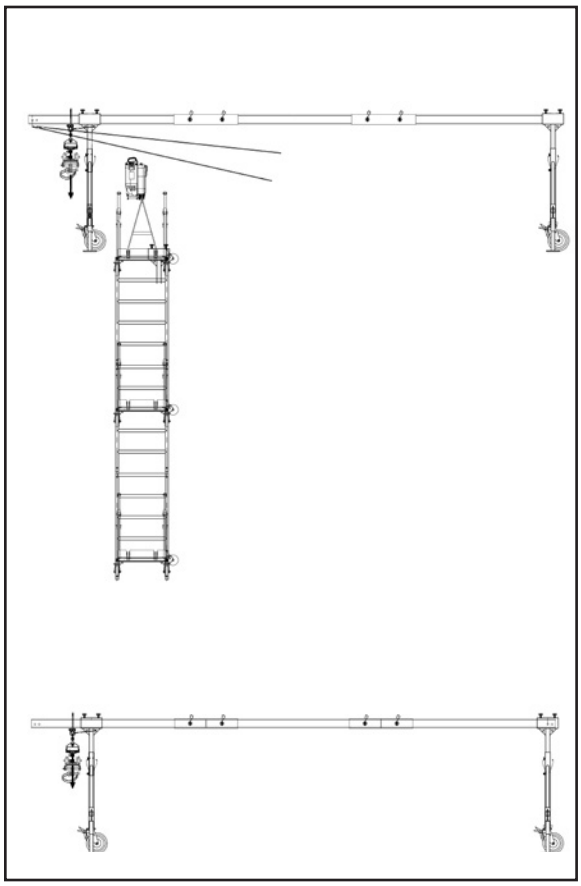
Mod platform for sloped roof

Call or click for more information
1-877-774-3370
www.spiderstaging.com



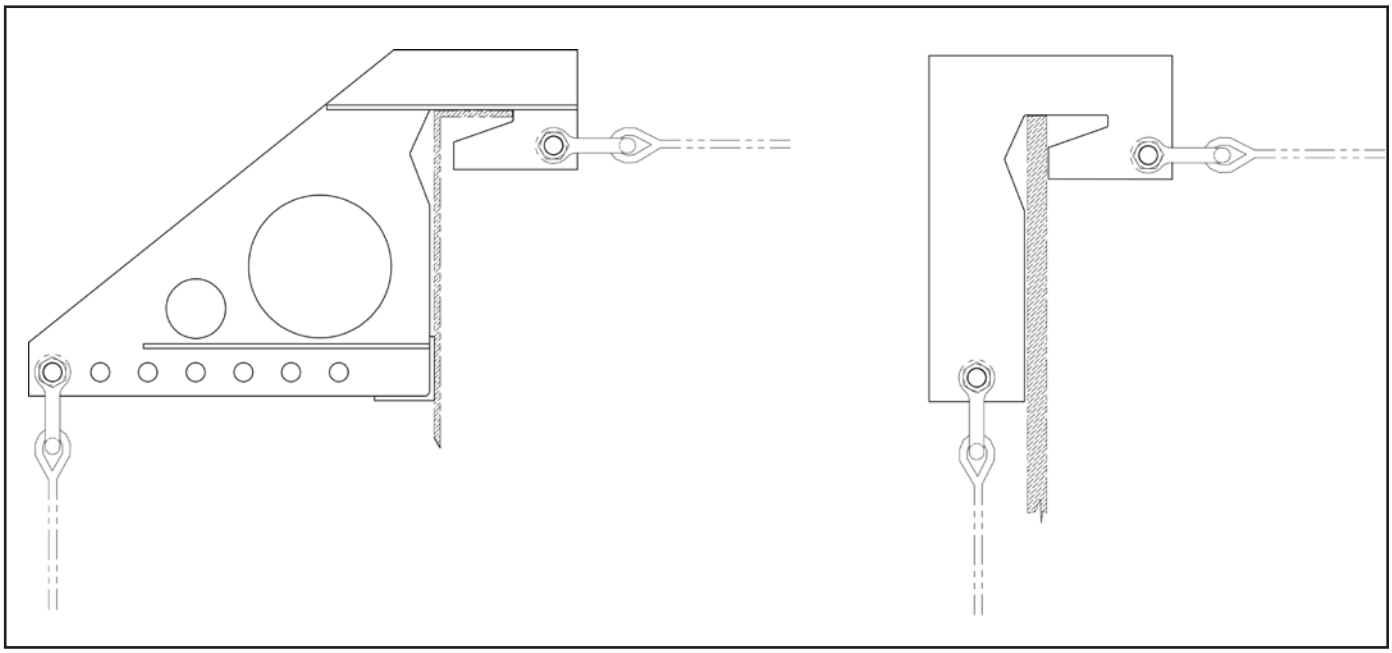
Nuclear plant containment dome access system



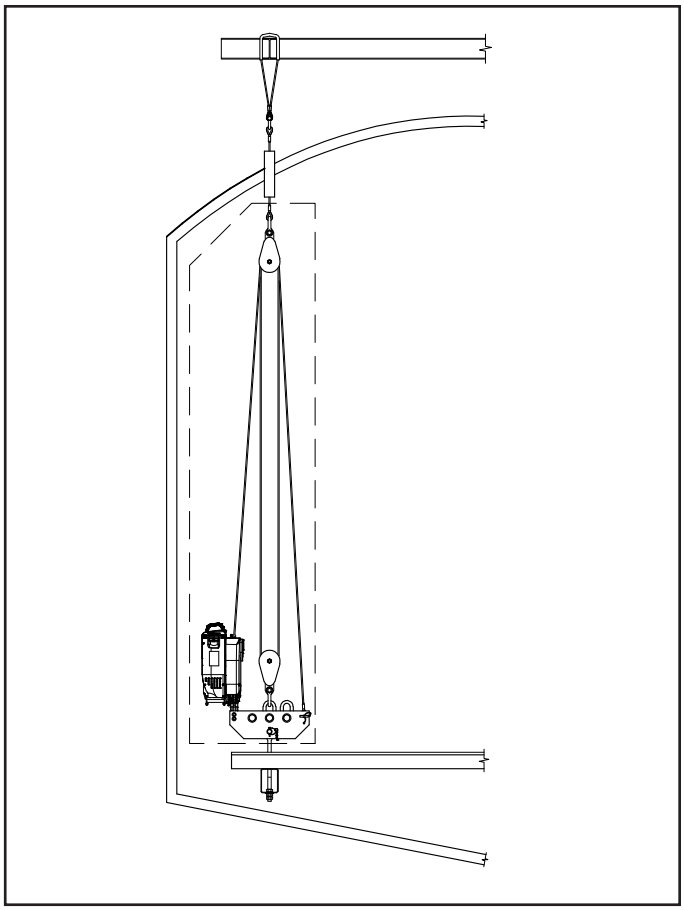


Multi-level platform & rigging

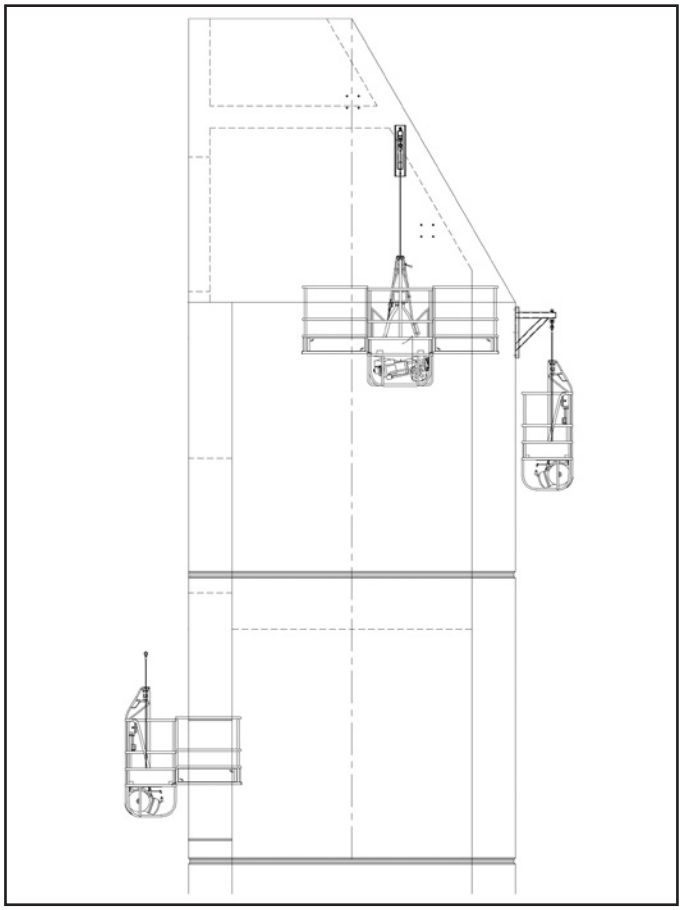
Typical Temporary Access Configurations



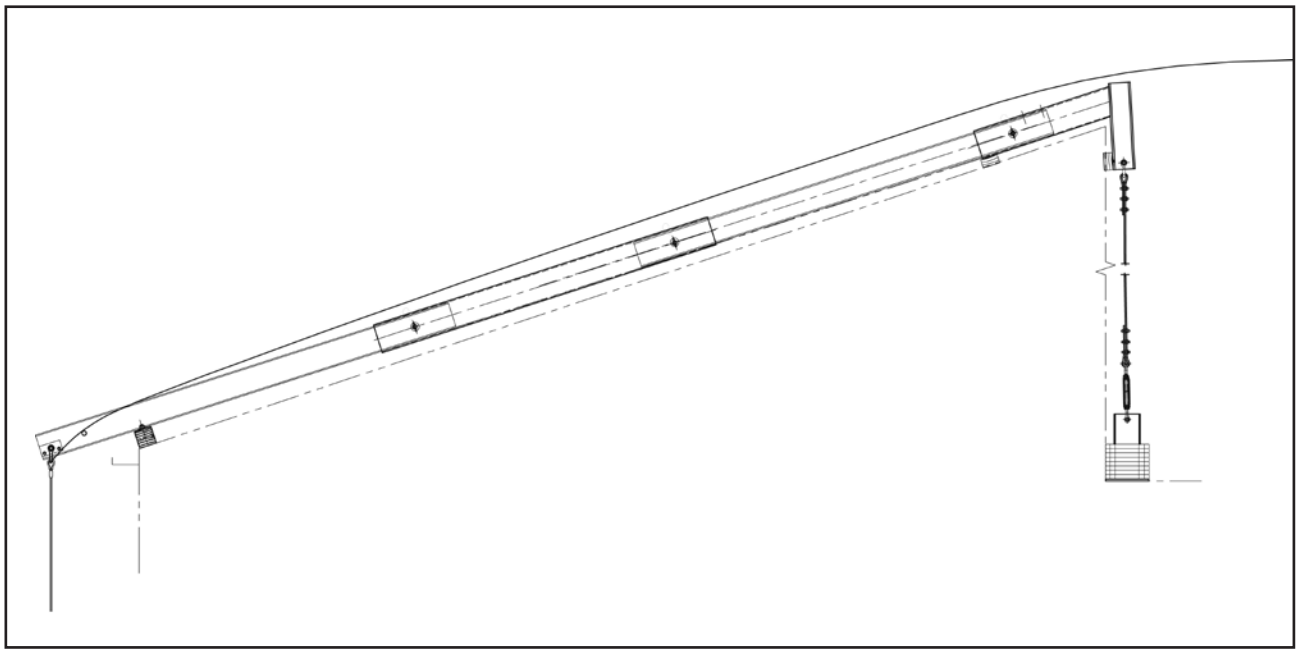
Tank and stack rigging hooks



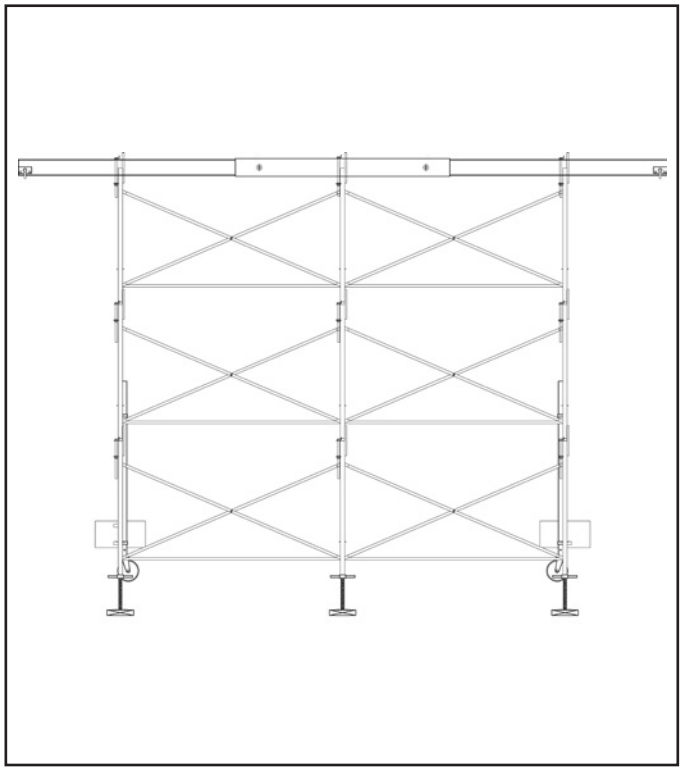
Multiple part rigging for increased load capacity



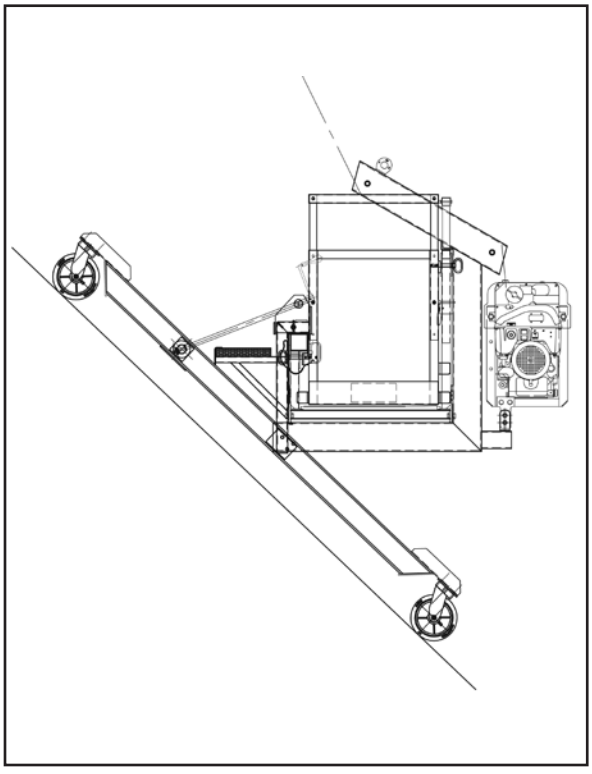
Rectangular silo access



Sloped roof rigging

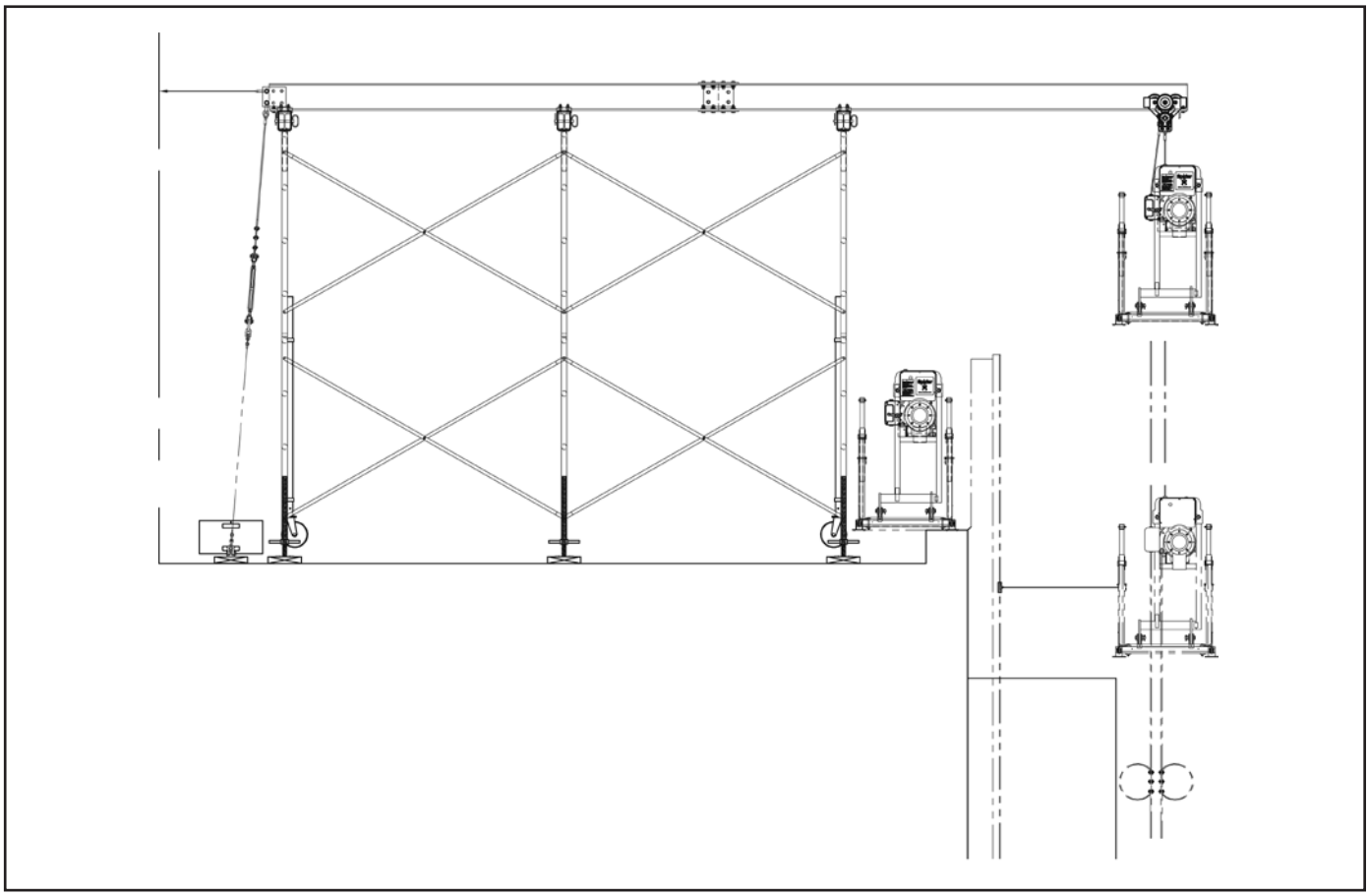


Double ended outrigger beam and tower

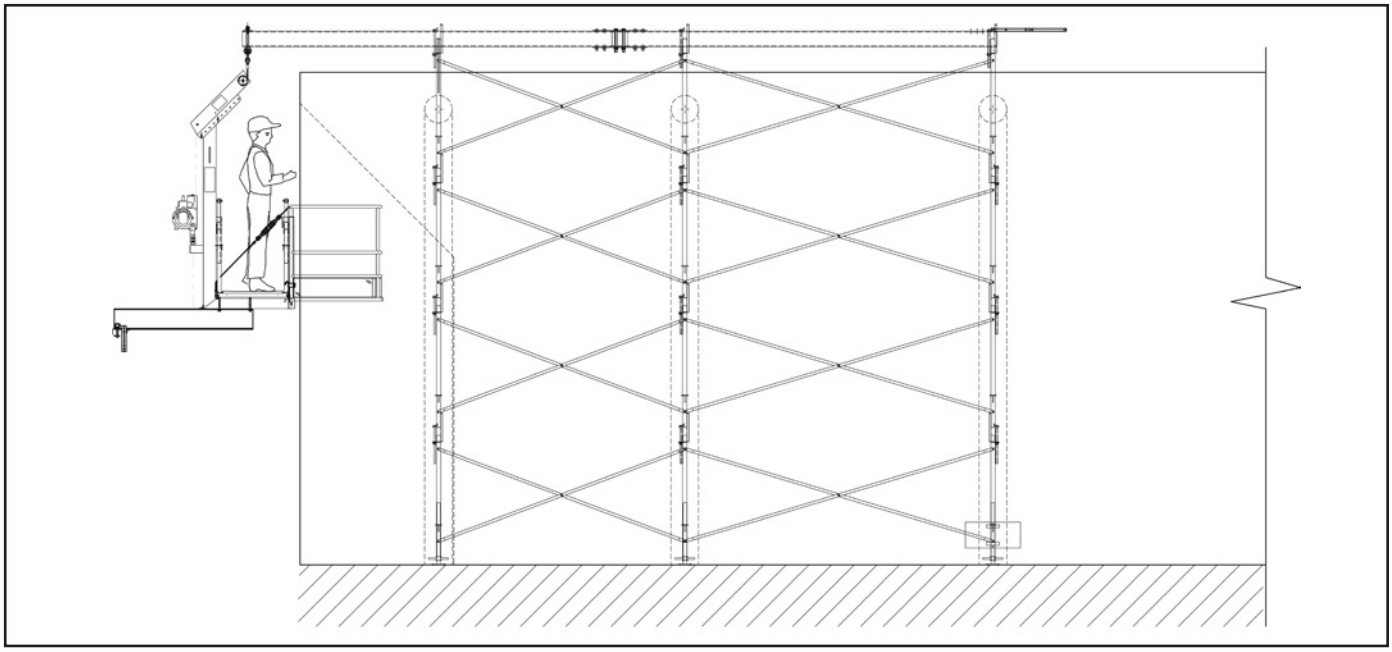


Sloped surface access

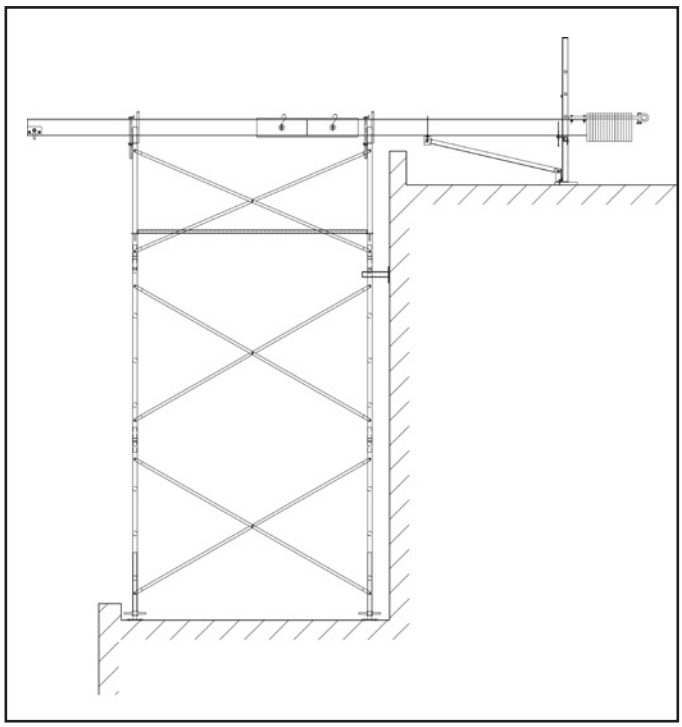
Typical Temporary Access Configurations



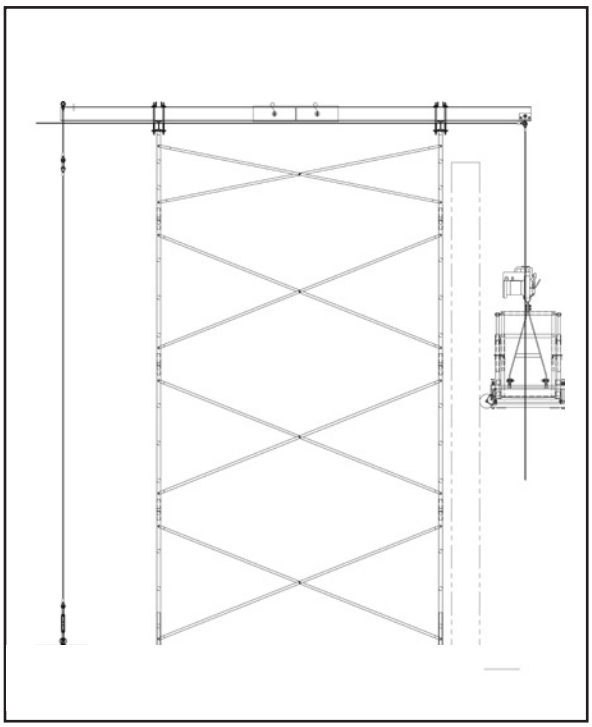
Roof rigged system



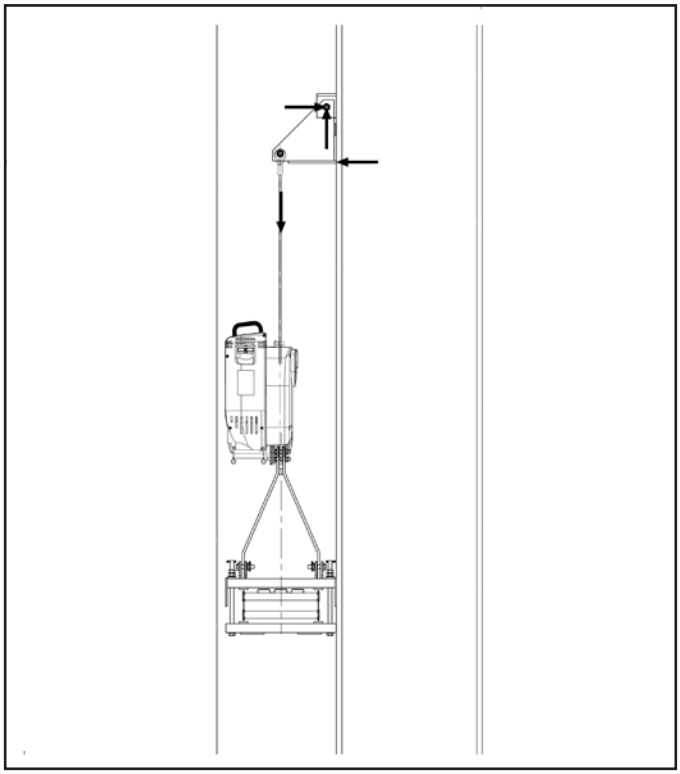
Access to façade projections

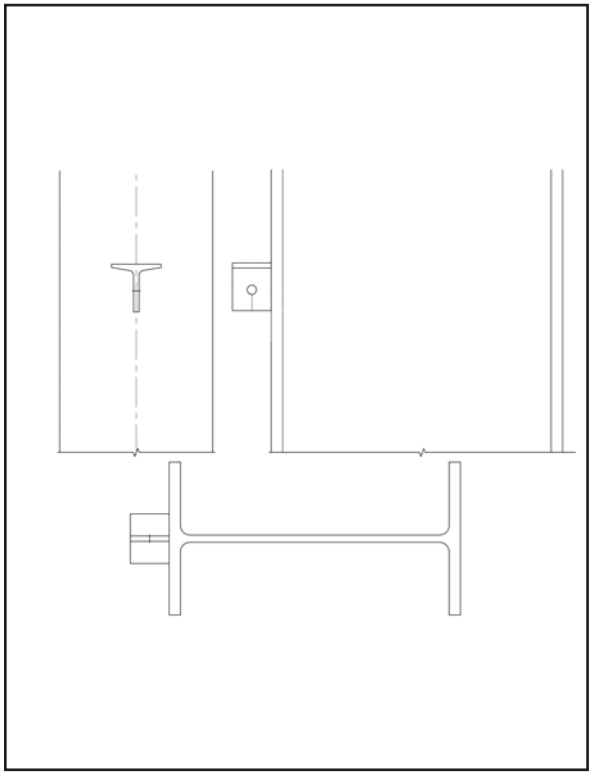


Outrigger tower in small space



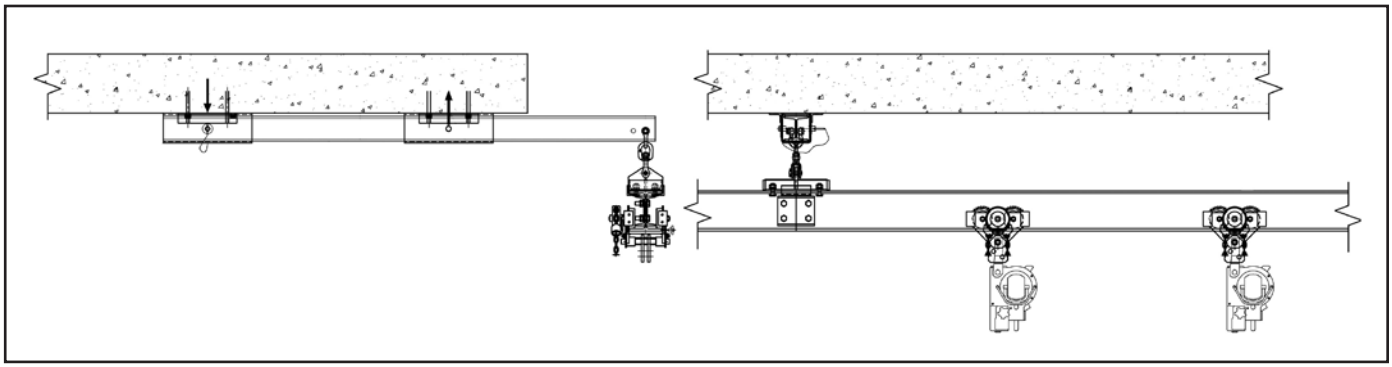
Outrigger beam on scaffold towers



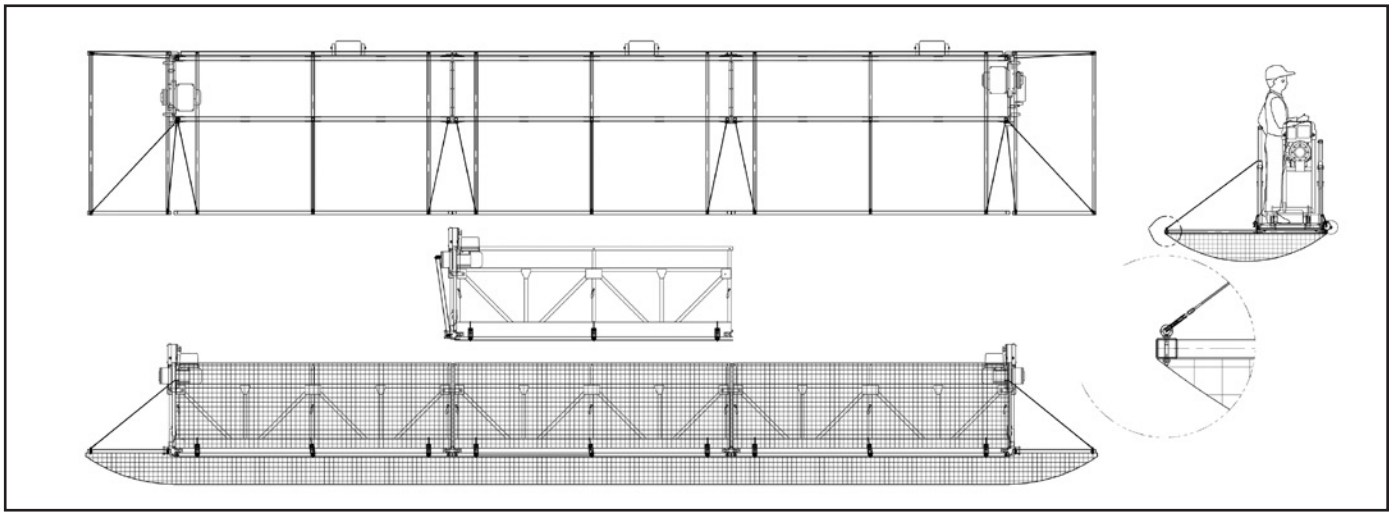


Narrow shaft access platform

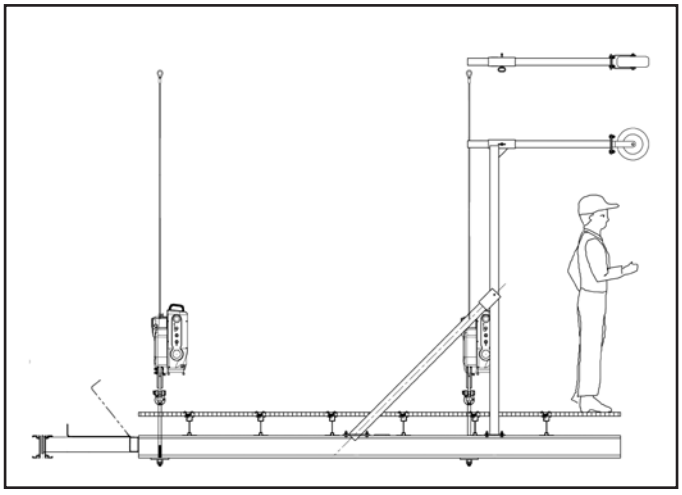
Typical Temporary Access Configurations



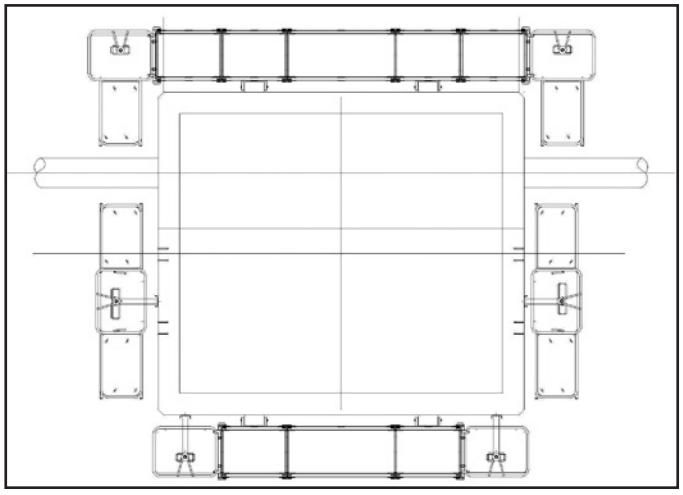
Trolley beam material lifting system



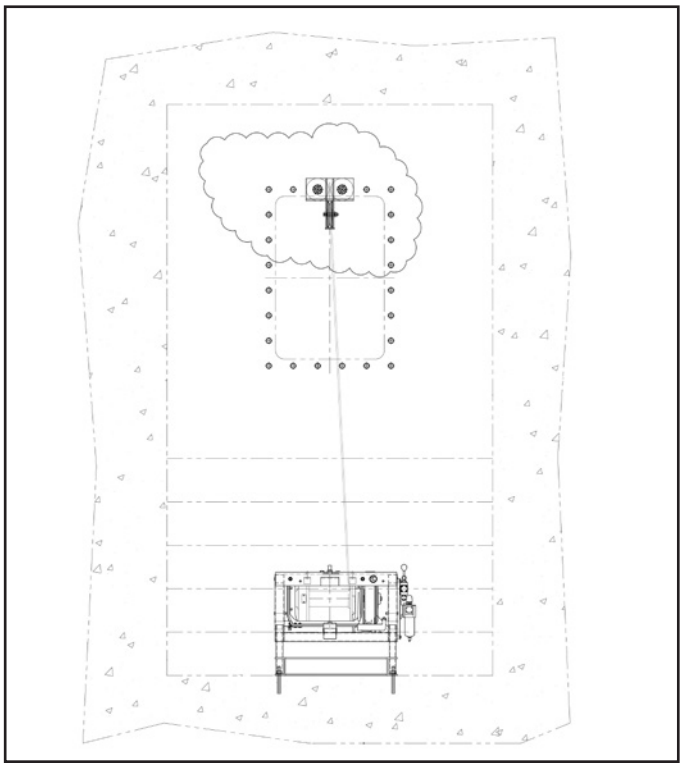
Debris containment in modular platform

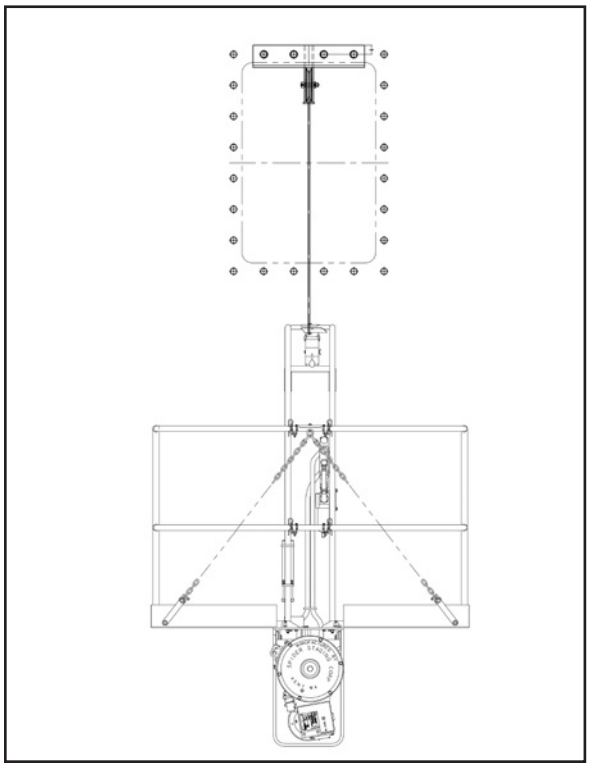


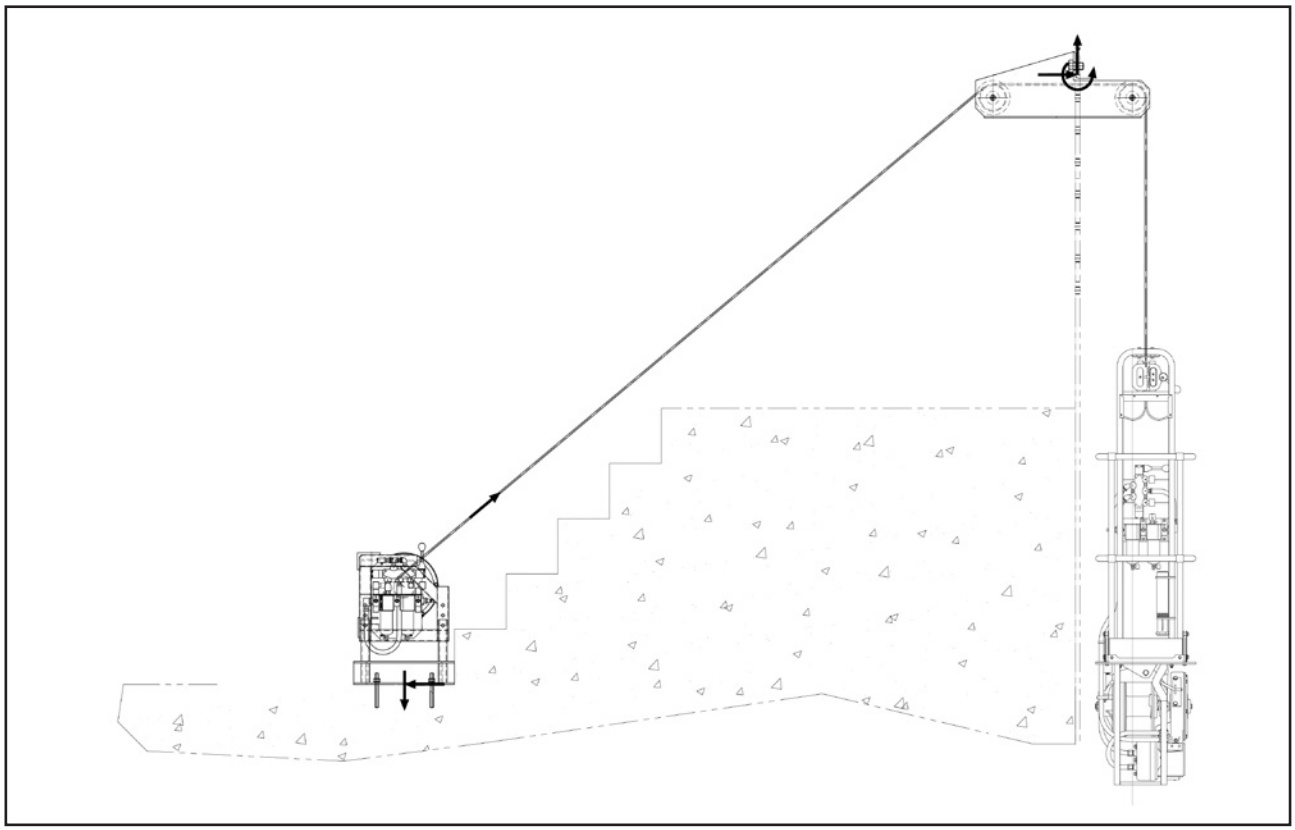
Large area stack platform



Bridge pier access







LSR1 application in penstock

Spider Hoist Features and Specifications

Traction Hoists

Spider traction hoists are load sensitive, meaning that traction automatically adjusts to match the applied load. The units are lightweight and modular. Each model has a primary brake and a built-in automatic secondary brake which can be manually activated. An additional wire rope brake is optional for use in 4-line (or other secondary support line) applications. The hoists travel at a maximum allowable travel speed of 35 ft/min (10.7 m/min). All Spider traction hoists are self-reeving and allow for controlled descent without power. In the electric hoists, an indicator light confirms power to the hoist. The operator has control of a full power cut-off switch in case of emergency. Model specifications follow on page 25.

Not all manufacturers invest in UL listing. Spider does. This ensures safer product and peace of mind. Make Spider your supplier of choice.

Drum Hoists

Spider drum hoists are work cages with built-in hoisting capabilities. The wire rope is secured by a swaged cable drum hook. Spider's unique level wind system automatically collects the wire rope neatly on the drum. There are no dangling ropes under the work cage.

Each unit has a built-in overload device and secondary overspeed brakes. Spider drum hoist work cages provide a very stable work platform with a low center of gravity. 500 ft (152.4 m) and 1,000 ft (304.8 m) wire rope drum capacities are available on most models. Flydecks can be added to all full size Spiders, increasing the working swath by up to 6 ft (1.8 m). Spider drum hoists can be combined with modular or plank-style platforms to make working platforms up to 62 ft (18.9 m) long.

Hoist Comparison Table

	Model	Motor	Gross Load Capacity lb (kg)	Draw	Speed ft/min (m/min)	Weight lb (kg)	Dimensions in. (mm)[5]	Drum Capacity ft (m)
Electric	SC1000 (9005)	1.2hp 208V 1 Ph 60Hz	1,000 (453.6)	7.5 Amps	35 (10.7)	101 (45.8)	14 x 12 x 24 (356 x 305 x 610)	N/A
	SC1500 (9015)	1.8hp 208V 1 Ph 60Hz	1,500 (680.4)	12 Amps	35 (10.7)	111 (50.4)	14 x 12 x 24 (356 x 305 x 610)	N/A
	ST-180	2hp 220V 1 Ph 60Hz	1,250 (567)	10 Amps	30 (9.2)	260 (117.9)	37 x 29 x 72 (940 x 737 x 1,829)	500 (152.4)
	ST-180-1[3]	2hp 220V 1 Ph 60Hz	1,250 (567)	10 Amps	30 (9.2)	280 (127)	37 x 29 x 72 (940 x 737 x 1,829)	1,000 (304.8)
	ST-180-5[3]	2hp 208V 3 Ph 60Hz	1,250 (567)	6.5 Amps	30 (9.2)	280 (127)	37 x 29 x 72 (940 x 737 x 1,829)	1,000 (304.8)
	ST-180-14-440	2hp 440V 3 Ph 50Hz	1,250 (567)	3 Amps	25 (7.6)	260 (117.9)	37 x 29 x 72 (940 x 737 x 1,829)	500 (152.4)
	SC40[3]	1.2hp 220V 1 Ph 60Hz	1,000 (453.6)	9 Amps	35 (10.7)	SF[1] 120 (54.4) LF[2] 130 (59)	15 x 17 x 22[4] (381 x 437 x 559)	N/A
	SC40[3] (99115)	1.5hp 220V 1 Ph 60Hz	1,500 (680.4)	12 Amps	35 (10.7)	SF[1] 123 (55.8) LF[2] 133 (60.3)	15 x 17 x 22[4] (381 x 437 x 559)	N/A
	SC40[3] (99135)	1.5hp 208/230V 3 Ph 60Hz	1,500 (680.4)	6 Amps	35 (10.7)	SF[1] 123 (55.8) LF[2] 133 (60.3)	15 x 17 x 22[4] (381 x 437 x 559)	N/A
	ST-19E	1.5hp 115V 1 Ph 50/60Hz	1,000 (453.6)	16 Amps	18 (5.6)	205 (93)	30 x 23 x 70[4] (762 x 584 x 1,778)	350/500 (106.7/152.4)
	Zmac/1000[3]	1.5hp 208V 1 Ph 60Hz	1,000 (453.6)	8 Amps	35 (10.7)	72 (32.7)	15.7 x 9.5 x 13 (399 x 241 x 330)	N/A
Air	SC1000A	4hp	up to 1,500 (680.4)	110 psi @ 70 cfm	35 (10.7)	89 (40.4)	12 x 14 x 20.5 (305 x 356 x 521)	N/A
	ST-17	1.25hp Vane	1,000 (453.6)	120 psi @ 60 cfm	30 (9.2)	209 (94.8)	37 x 29 x 72 (940 x 737 x 1,829)	350/500 (106.7/152.4)
	ST-19A	1.25hp Vane	1,000 (453.6)	120 psi @ 60 cfm	30 (9.2)	205 (93)	30 x 23 x 70 (762 x 584 x 1,778)	350 (106.7)
	SC30	4hp Vane	1,000/1,250 (453.6/567)	100/120 psi@ 80 cfm	35 (10.7)	115 (52.2)	15 x 15 x 22 (381 x 381 x 559)	N/A
	ST-26	1.25hp Vane	1,000 (453.6)	120 psi @ 60 cfm	30 (9.2)	180 (81.7)	27 x 17.5 x 76 (1,448 x 445 x 1,930)	235 (71.6)
	Air Zmac[3]	4hp	1,000 (453.6)	110 psi @ 75 cfm	35 (10.7)	68 (30.8)	15.1 x 10 x 14.75 (384 x 254 x 375)	N/A

[1] Short Frame [2] Long Frame [3] Rental Only [4] Measurement Shown for Short Frame [5] All dimensions are consistently w x d x h.

Call or click for more information
1-877-774-3370
www.spiderstaging.com

SC1000 and SC1500

Specifications:	SC1000 (9005)	SC1500 (9015)
Gross Load Capacity	1,000 lb (453.6 kg)	1,500 lb (680.4 kg)
Dimensions:	14 x 12 x 24 in. (356 x 305 x 610 mm)	14 x 12 x 24 in. (356 x 305 x 610 mm)
Weight:	101 lb (45.8 kg)	111 lb (50.4 kg)
Travel Speed:	35 ft/min (10.7 m/min)	35 ft/min (10.7 m/min)
Power/ Operating Range:	208V +10%/-15% Single Phase	208V +10%/-15% Single Phase 208V +10%/-10% Three Phase
Wire Rope Diameter:	5/16 in., 8 mm or 8.4 mm	5/16 in., 8 mm or 8.4 mm
Wire Rope Construction:	5 x 26, or 6 x 31 IWRC or FC Right Regular Lay IPS or EIPS Preformed, Galvanized or Bright	5 x 26 8.4 mm IWRC or FC Right Regular Lay IPS or EIPS Preformed, Galvanized or Bright
Construction:	Aluminum, steel and engineered polymer	Aluminum, steel and engineered polymer

Spider's SC1000 series hoists are the market leader.

Tens of thousands of these hoists are in use daily worldwide. Contractors made SC1000 and SC1500 their hoists of choice because these hoists make them more productive. Simply put – robust performance, industry-leading durability and proven lower total cost of ownership offer the best lifetime value for fleet owners or rental operators.

Spider operates the largest swing stage rental fleet in the Americas. Spider invests in SC1000 and SC1500 hoists to provide the most reliable experience for work at height.

Robust Electrical Performance

- Deepest voltage operating range—177 run volts
- Robust components—sized to handle low end voltage
- New technologies increase uptime
- Field-replaceable motherboard to resolve most electrical issues in 10 minutes or less

Durability

- Nearly impossible to jam wire rope
- Engineered polymer covers prevent damage to expensive components and prevent debris build-up
- Long mechanical part life
- Designed for easy clean-up and maintenance

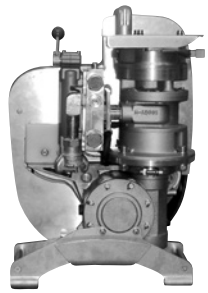
Field-Tested Operation

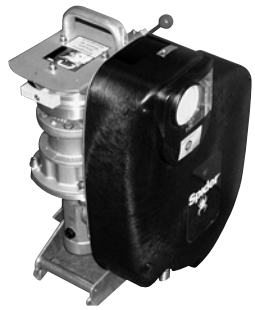
- Most extensively tested hoist ever
- Rigorous attention to field results
- Disciplined redesign to satisfy our internal fleet needs

Key Features:

- Deep operating range—208V +10%/-15% Single Phase, +10%/-10% Three Phase
- Electrical improvements extend component life
- Long mechanical component life
- Simplified operation
- English/Spanish labels & Operators' Manuals
- Reliable load dependent traction
- Controlled descent
- Remote-ready
- Power indicator light
- Built-in overspeed brake
- Hour meter
- Polymer covers to prevent debris accumulation and protect more costly components
- Optional secondary wire rope brake
- Optional overload kit
- Optional top limit switch

Spider SC1000A hoist offers the best of proven technology and innovative features.





Innovative Design:

- Flexibility of multiple load ratings from one hoist - labeled 750/1000/1500 lb. rated with 90/100/110 PSI at max. 70 cfm
- Load controlled by PSI - no need to open hoist to reset load capacity
- Quiet operation - only 92 dB compared to industry standard of 110 dB
- Air power pack removable (1-screw) to switch air hoist to electric for fleet flexibility
- Filter Lubricator Assembly included with hoist and can be mounted either to the hoist or to a work cage, Spider Mod, Modulo or knock down modular stages
- 2 high impact, durable polymer covers (mainframe & overspeed)
- Simplified design cuts service time: basic service in 10 minutes, and overhaul is 1 hour

Durability:

- Simplified ergonomics – easier handle operation, more comfortable control descent
- Compact, ergonomic design to survive transportation and delivery better
- Filter Lubricator Assembly features more robust connection to mounting plate to reduce breakage
- Air brake lines are rubber, more robust & flexible
- IP65 Rated Enclosed Brake
- Protective coating on internal motor & brake components to protect against rust
- Remote ready – accepts 9-61, 8-0399 and 701303 remotes
- Dual wire rope optional – bolt-in installation for aftermarket hoists
- UL/CUL listing

Field Tested Operation:

- Extensively tested traction system – nearly impossible to jam wire rope
- Wire rope can't continue to build up around the sheave if operated after overspeed is tripped
- Same trusted gast air motor, valve & air motor parts, and oiler filter unit for ease of supply and better inventory availability

Protect your Investment!
Use hoist cover 9970 on page 135.

For welding installation details, see page 39.

See page 38 for common accessories used with SC1000/1500 hoists.

Specifications:	SC1000A
Gross Load Capacity:	750 lb (340.2 kg) @ 60 psi 1,000 lb (453.6 kg) @ 90 psi 1,500 lb (680.4 kg) @ 110 psi
Dimensions:	12 x 14 x 20.5 in. (305 x 356 x 521 mm)
Weight:	88 lb (39.2 kg)
Travel Speed:	Up to 35 ft/min (10.7 m/min)
Wire Rope:	5/16 in., 8 mm or 8.4 mm
Wire Rope Construction:	5 x 26 8.4 mm IWRC or FC Right Regular Lay IPS or EIPS Preformed, Galvanized or Bright
Power Requirements:	750 lb (340.2 kg): 90 psi 1,000 lb (453.6 kg): 100 psi @ 70 cfm 1,500 lb (680.4 kg): 110 psi @ 70 cfm
SC1000 hoist includes 8-0107 Filter Lubricator assembly. Filter lubricator mounts to hoist on stirrup or on workcage or modular platform guardrail.	

SC1000					
	9005	**9006**	**9007**	**9008**	**9009**
Gross Load Capacity	1,000 lb (453.6 kg)	1,000 lb (453.6 kg)	1,000 lb (453.6 kg)	1,000 lb (453.6 kg)	1,000 lb (453.6 kg)
Dimensions	14 x 12 x 24 in. (356 x 305 x 610 mm)	14 x 12 x 24 in. (356 x 305 x 610 mm)	14 x 12 x 24 in. (356 x 305 x 610 mm)	14 x 12 x 24 in. (356 x 305 x 610 mm)	14 x 12 x 24 in. (356 x 305 x 610 mm)
Weight	101 lb (45.8 kg)	105 lb (47.6 kg)	103 lb (46.7 kg)	99 lb (44.9 kg)	103 lb (46.7 kg)
Travel Speed	35 ft/min (10.7 m/min)	35 ft/min (10.7 m/min)	35 ft/min (10.7 m/min)	35 ft/min (10.7 m/min)	35 ft/min (10.7 m/min)
Power/Operating Range	208V +10%/-15% Single Phase	208V +10%/-15% Single Phase	208V +10%/-15% Single Phase	208V +10%/-15% Single Phase	208V +10%/-15% Single Phase
Wire Rope Diameter	5/16 in., 8 mm or 8.4 mm	5/16 in., 8 mm or 8.4 mm	5/16 in., 8 mm or 8.4 mm	5/16 in., 8 mm or 8.4 mm	5/16 in., 8 mm or 8.4 mm
Wire Rope Construction	5 x 26, 6 x 19, or 6 x 31 IWRC or FC Right Regular Lay IPS or EIPS Preformed, Galvanized or Bright	5 x 26, 6 x 19, or 6 x 31 IWRC or FC Right Regular Lay IPS or EIPS Preformed, Galvanized or Bright	5 x 26, 6 x 19, or 6 x 31 IWRC or FC Right Regular Lay IPS or EIPS Preformed, Galvanized or Bright	5 x 26, 6 x 19, or 6 x 31 IWRC or FC Right Regular Lay IPS or EIPS Preformed, Galvanized or Bright	5 x 26, 6 x 19, or 6 x 31 IWRC or FC Right Regular Lay IPS or EIPS Preformed, Galvanized or Bright
Construction	Aluminum, steel and engineered polymer	Aluminum, steel and engineered polymer	Aluminum, steel and engineered polymer	Aluminum, steel and engineered polymer	Aluminum, steel and engineered polymer
Overspeed Brake	x	x	x	x	x
Overload Device[1]			x	x	x
Slack Wire Rope Brake		x	x		x
Top Limit			x		

[1] Required in Canada

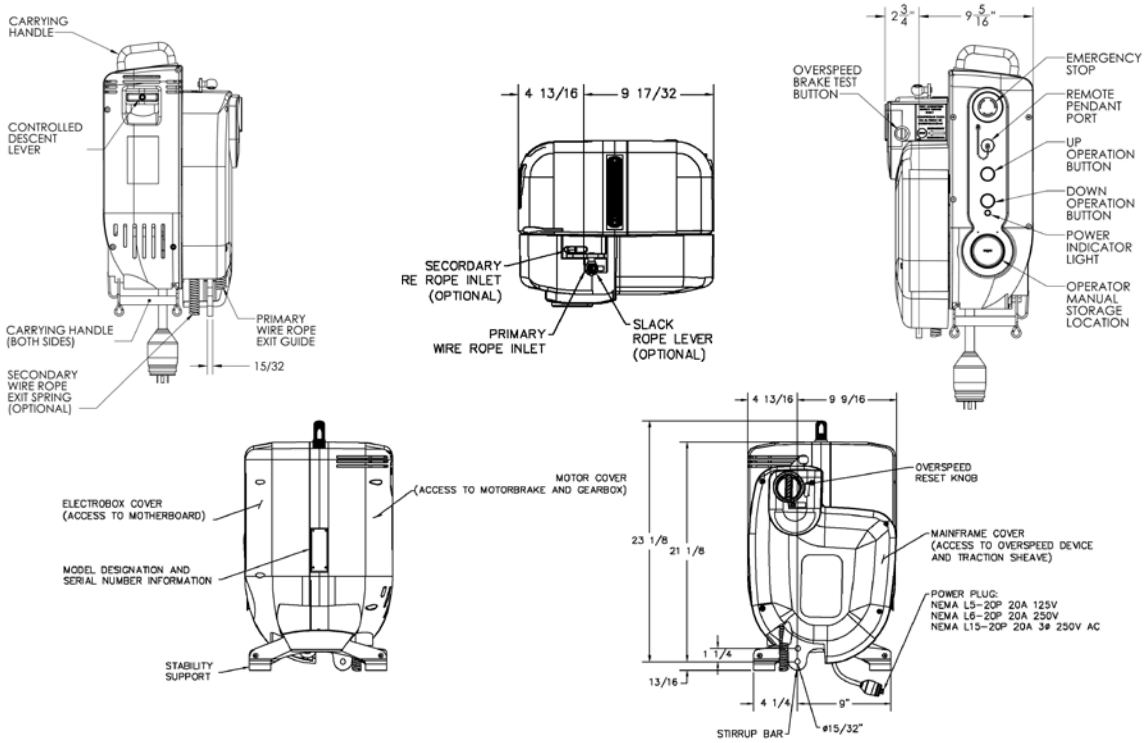
SC1500				
9015	**9016**	**9017**	**9018**	**9019**
1,500 lb (680.4 kg)	1,500 lb (680.4 kg)	1,500 lb (680.4 kg)	1,500 lb (680.4 kg)	1,500 lb (680.4 kg)
14 x 12 x 24 in. (356 x 305 x 610 mm)	14 x 12 x 24 in. (356 x 305 x 610 mm)	14 x 12 x 24 in. (356 x 305 x 610 mm)	14 x 12 x 24 in. (356 x 305 x 610 mm)	14 x 12 x 24 in. (356 x 305 x 610 mm)
111 lb (50.4 kg)	115 lb (52.2 kg)	105 lb (47.6 kg)	101 lb (45.8 kg)	105 lb (47.6 kg)
35 ft/min (10.7 m/min)	35 ft/min (10.7 m/min)	35 ft/min (10.7 m/min)	35 ft/min (10.7 m/min)	35 ft/min (10.7 m/min)
208V +10%/-15% Single Phase	208V +10%/-15% Single Phase	208V +10%/-15% Single Phase	208V +10%/-15% Single Phase	208V +10%/-15% Single Phase
5/16 in., 8.4 mm	5/16 in., 8.4 mm	5/16 in., 8.4 mm	5/16 in., 8.4 mm	5/16 in., 8.4 mm
5 x 26 8.4 mm IWRC or FC Right Regular Lay IPS or EIPS Preformed, Galvanized or Bright	5 x 26 8.4 mm IWRC or FC Right Regular Lay IPS or EIPS Preformed, Galvanized or Bright	5 x 26 8.4 mm IWRC or FC Right Regular Lay IPS or EIPS Preformed, Galvanized or Bright	5 x 26 8.4 mm IWRC or FC Right Regular Lay IPS or EIPS Preformed, Galvanized or Bright	5 x 26 8.4 mm IWRC or FC Right Regular Lay IPS or EIPS Preformed, Galvanized or Bright
Aluminum, steel and engineered polymer	Aluminum, steel and engineered polymer	Aluminum, steel and engineered polymer	Aluminum, steel and engineered polymer	Aluminum, steel and engineered polymer
x	x	x	x	x
		x	x	x
	x	x		x
		x		

SC1500					
	9035	**9036**	**9037**	**9038**	**9039**
Gross Load Capacity	1,500 lb (680.4 kg)	1,500 lb (680.4 kg)	1,500 lb (680.4 kg)	1,500 lb (680.4 kg)	1,500 lb (680.4 kg)
Dimensions	14 x 12 x 24 in. (356 x 305 x 610 mm)	14 x 12 x 24 in. (356 x 305 x 610 mm)	14 x 12 x 24 in. (356 x 305 x 610 mm)	14 x 12 x 24 in. (356 x 305 x 610 mm)	14 x 12 x 24 in. (356 x 305 x 610 mm)
Weight	101 lb (45.8 kg)	105 lb (47.6 kg)	105 lb (47.6 kg)	101 lb (45.8 kg)	105 lb (47.6 kg)
Travel Speed	35 ft/min (10.7 m/min)	35 ft/min (10.7 m/min)	35 ft/min (10.7 m/min)	35 ft/min (10.7 m/min)	35 ft/min (10.7 m/min)
Power/Operating Range	208V +/-10% Three Phase	208V +/-10% Three Phase	208V +/-10% Three Phase	208V +/-10% Three Phase	208V +/-10% Three Phase
Wire Rope Diameter	5/16 in., 8.4 mm	5/16 in., 8.4 mm	5/16 in., 8.4 mm	5/16 in., 8.4 mm	5/16 in., 8.4 mm
Wire Rope Construction	5 x 26 8.4 mm IWRC or FC Right Regular Lay IPS or EIPS Preformed, Galvanized or Bright	5 x 26 8.4 mm IWRC or FC Right Regular Lay IPS or EIPS Preformed, Galvanized or Bright	5 x 26 8.4 mm IWRC or FC Right Regular Lay IPS or EIPS Preformed, Galvanized or Bright	5 x 26 8.4 mm IWRC or FC Right Regular Lay IPS or EIPS Preformed, Galvanized or Bright	5 x 26 8.4 mm IWRC or FC Right Regular Lay IPS or EIPS Preformed, Galvanized or Bright
Construction	Aluminum, steel and engineered polymer	Aluminum, steel and engineered polymer	Aluminum, steel and engineered polymer	Aluminum, steel and engineered polymer	Aluminum, steel and engineered polymer
Overspeed Brake	x	x	x	x	x
Overload Device			x	x	x
Slack Wire Rope Brake		x	x		x
Top Limit			x		

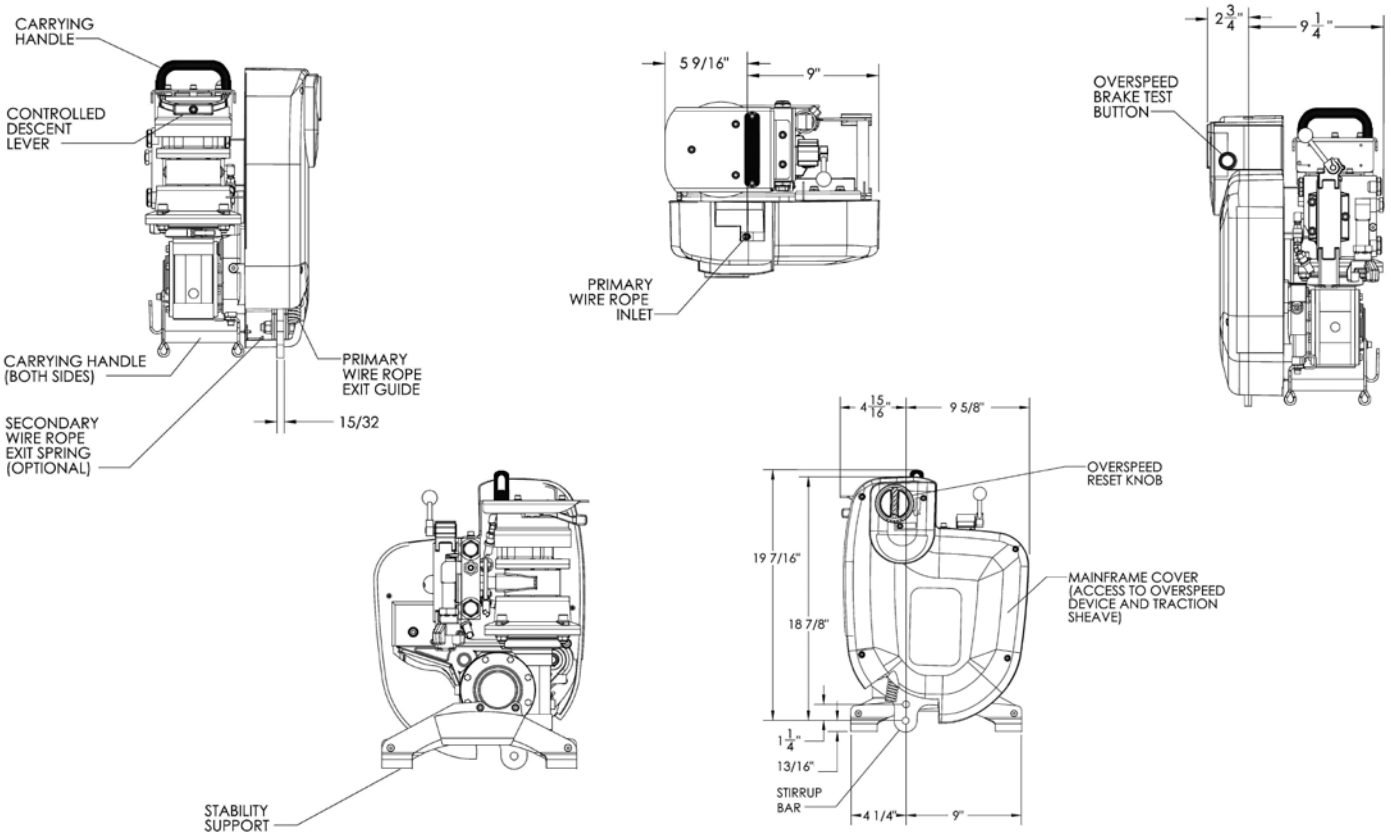
SC1000 Air		SC1000–110V			
9025	**9026**	**9045**	**9046**	**9048**	**9049**
1,500 lb (680.4 kg)[2]	1,500 lb (680.4 kg)[2]	1,000 lb (453.6 kg)	1,000 lb (453.6 kg)	1,000 lb (453.6 kg)	1,000 lb (453.6 kg)
12 x 14 x 20.5 in. (305 x 356 x 521 mm)	12 x 14 x 20.5 in. (305 x 356 x 521 mm)	12 x 14 x 20.5 in. (305 x 356 x 521 mm)	14 x 12 x 24 in. (356 x 305 x 610 mm)	14 x 12 x 24 in. (356 x 305 x 610 mm)	14 x 12 x 24 in. (356 x 305 x 610 mm)
89 lb (40.4 kg)[2]	93 lb (42.1 kg)[2]	99 lb (44.9 kg)	103 lb (46.7 kg)	99 lb (44.9 kg)	103 lb (46.7 kg)
35 ft/min (10.7 m/ min)	35 ft/min (10.7 m/ min)	35 ft/min (10.7 m/ min)	35 ft/min (10.7 m/ min)	35 ft/min (10.7 m/ min)	35 ft/min (10.7 m/min)
60-110 PSI 70 CFM Max.	60-110 PSI 70 CFM Max.	110V +10%/-15% Single Phase	110V +10%/-15% Single Phase	110V +10%/-15% Single Phase	110V +10%/-15% Single Phase
5/16 in., 8 mm or 8.4 mm	5/16 in., 8 mm or 8.4 mm	5/16 in., 8 mm or 8.4 mm	5/16 in., 8 mm or 8.4 mm	5/16 in., 8 mm or 8.4 mm	5/16 in., 8 mm or 8.4 mm
5 x 26 8.4 mm IWRC or FC Right Regular Lay IPS or EIPS Preformed, Galvanized or Bright	5 x 26 8.4 mm IWRC or FC Right Regular Lay IPS or EIPS Preformed, Galvanized or Bright	5 x 26 8.4 mm IWRC or FC Right Regular Lay IPS or EIPS Preformed, Galvanized or Bright	5 x 26 8.4 mm IWRC or FC Right Regular Lay IPS or EIPS Preformed, Galvanized or Bright	5 x 26 8.4 mm IWRC or FC Right Regular Lay IPS or EIPS Preformed, Galvanized or Bright	5 x 26 8.4 mm IWRC or FC Right Regular Lay IPS or EIPS Preformed, Galvanized or Bright
Aluminum, steel and engineered polymer	Aluminum, steel and engineered polymer	Aluminum, steel and engineered polymer	Aluminum, steel and engineered polymer	Aluminum, steel and engineered polymer	Aluminum, steel and engineered polymer
x	x	x	x	x	x
				x	x
	x		x		x

[2] Weight includes filter/lubricator assembly.

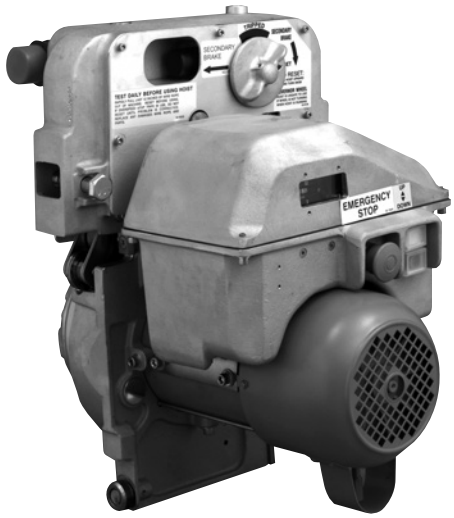
SC1000 / SC1500

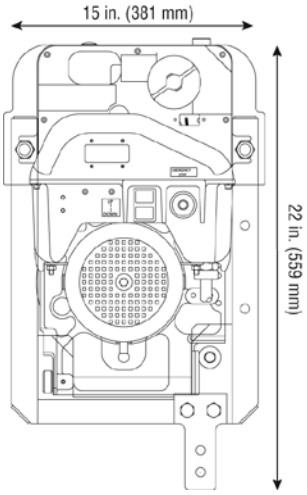


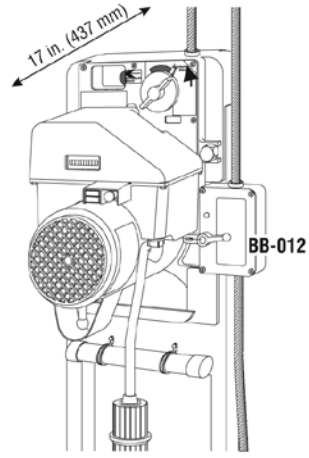
SC1000 Air



SC40 Spider Climber







Optional Slack Wire Rope Brake shown

The SC40 is Spider's original electric traction hoist and is known for its proven reliability in rental fleets.

Modular construction allows for quick assembly and easy use, inspection and maintenance (with 2 bolt disassembly).

Spider equipment has been used by various contractors and subcontractors including caulkers, glazers, inspectors, iron workers, marine contractors, masons, painters and waterproofers, and has consistently exceeded their expectations.

The typical assembly of this hoist model is on a modular platform, a work cage and as a material hoist.

Key features:

- Electromagnetic primary brake
- Built-in secondary overspeed brake
- Emergency stop button
- Full power cut-off switch
- Overload sensor
- Hour meter
- Power indicator light
- Tolerant light touch reeving system
- Controlled descent at half rated speed during power loss
- **Available in rental fleet only**

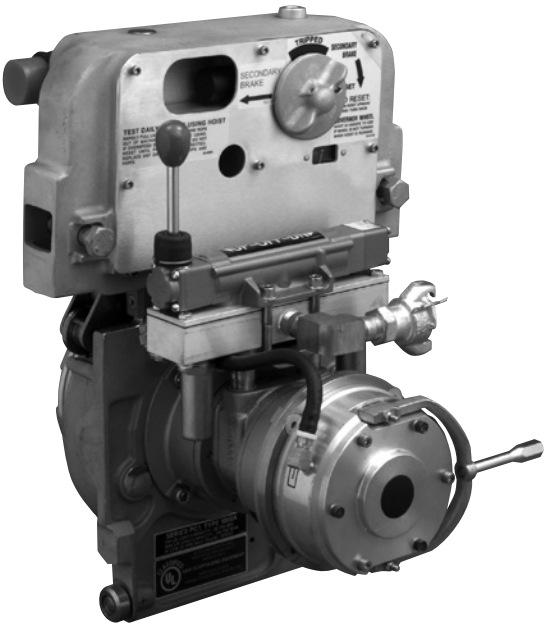
Can be combined with a variety of stirrups and platforms

1,500 lb. (680.4 kg) model available

- 99115: Single phase
- 99135: Three phase

Specifications:	SC40
Gross Load Capacity:	1,000 or 1,500 lb (453.6 or 680.4 kg)
Dimensions:	15 x 17 x 22 in. (381 x 437 x 559 mm)
Weight:	Various (see Hoist Comparison Table on page 25)
Travel Speed:	35 ft/min (10.7 m/min)
Voltage Options:	220V single phase, 208V three phase
Wire Rope Diameter:	5/16 in. (8 mm)
Construction:	Aluminum and steel

SC30 Air Spider Climber



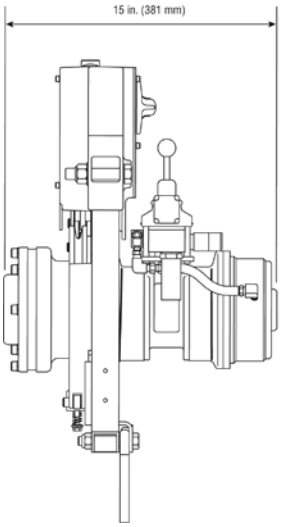
The SC30 is the scaffolding industry's premier heavy-duty, air driven traction hoist. Spider relies on the dependable workhorse performance of the SC30 in its rental fleet.

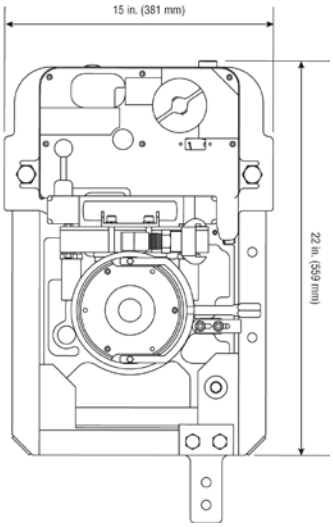
Modular construction allows for quick and easy use, inspection and maintenance (with 2 bolt disassembly).

Key features:

- Built-in overspeed brake
- Controlled descent
- Emergency stop button
- Tolerant light touch reeving system
- **Available on special order basis only**

Can be combined with a variety of stirrups and platforms





Specifications:	SC30
Gross Load Capacity:	1,000 lb (453.6 kg) at 100 psi 1,250 lb (567 kg) at 120 psi
Dimensions:	15 x 15 x 22 in. (381 x 381 x 559 mm)
Weight:	115 lb (52.2 kg)
Travel Speed:	35 ft/min (10.7 m/min)
Power:	100/120 psi @ 80 cfm
Construction:	Aluminum and steel

Zmac/1000®

The Zmac/1000® Electric and Zmac/1000® Air offer full performance in a portable, compact hoist.

The two hoists are UL and CUL listed and meet or exceed all current ANSI and OSHA requirements. These hoists are compact, quiet and durable. Using a sophisticated, patented traction principle, the electric and air models give safe and reliable performance. Easy to handle, the Zmac/1000® (E) and Zmac/1000®(A) have been designed to meet your most demanding requirements.

Key Features of Zmac/1000® Electric and Zmac/1000® Air:

- Control descent
- Self-reeving
- Patent Traction Technology
- Carrying handles
- Pendant control (optional)
- Secondary Bisolock (optional with the Zmac/1000® Air)
- The Zmac/1000® Electric features quiet run technology for smooth and silent operation.
- **Available in rental fleet only**

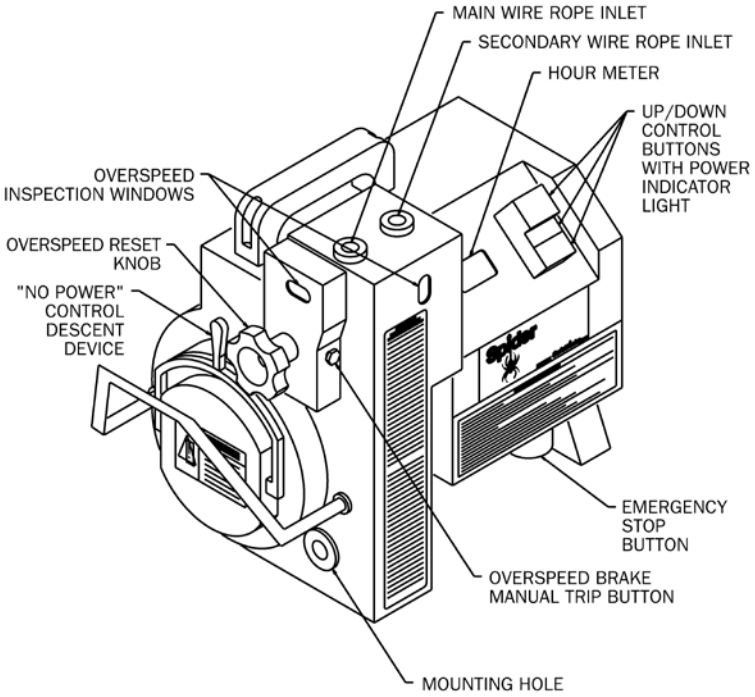
Protect your Investment!
Use hoist cover 700784-1 or 701018-1 on page 171.

Specifications:	Spider Zmac / 1000® Electric (700783-1)	Spider Zmac / 1000® Air (701127-1)
Gross Load Capacity:	1,000 lb (453.6 kg)	1,000 lb (453.6 kg)
Dimensions:	15.7 x 9.5 x 13 in. (399 x 241 x 330 mm)	15.1 x 10 x 14.75 in. (385 x 254 x 375 mm)
Weight:	72 lb (32.7 kg)	68 lb (30.8 kg)
Travel Speed:	35 ft/min (10.7 m/min)	35 ft/min (10.7 m/min)
Power:	208V (+/-10%)	Air consumption: 100 psi, 75 cfm
Wire Rope Diameter:	5/16 in. (8 mm)	5/16 in. (8 mm)
Other:	• Aluminum and stainless steel • "3-piece" construction • Reliable direct drive power transfer • Low voltage indicator	• Driven by a 4HP Air motor

Zmac/1000® is a registered mark of Nihon Bisoh Co, Japan. Reference is made to this product in Spider's rental fleet and installed contractor fleets.

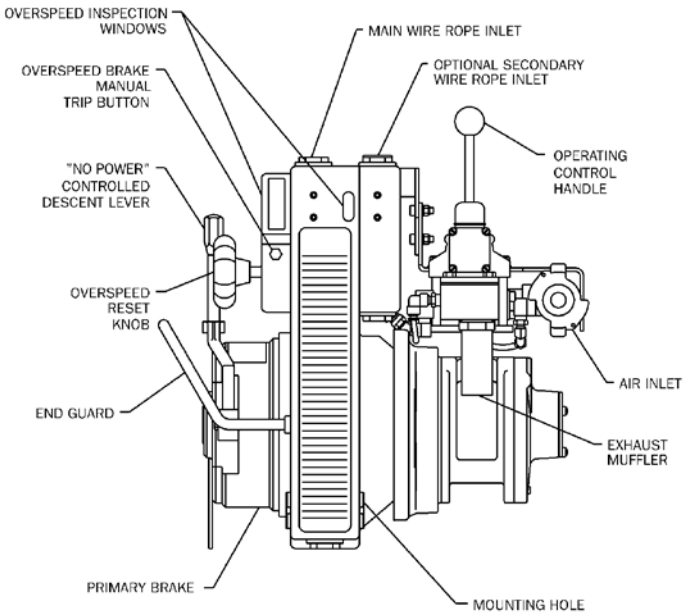
For welding installation details, see page 39.

Zmac/1000® Electric



- **Available in rental fleet only**

Zmac/1000® Air



Astro E1500 Hoist

NEW *for Canada!*

We took our proven Astro hoist and increased its capacity to 1,500 lb (680.4 kg) to give you the NEW Astro E1500. It combines a reliable, proven traction principle with an advanced concept in power transmissions, resulting in a lightweight, compact, efficient hoist.

Key Features:

- Used to raise, support and lower suspended scaffolds, work cages and bosun chairs on or in buildings and other structures
- Load sensitive traction saves wear and tear, extending wire rope life, and prevents costly wire rope jams.
- Built-in overspeed brake, slack wire rope brake and overload device enable safer operation.
- Standard pendant receptacle makes plugging in a 700786-xx Remote Assembly fast and easy. This remote is available in 5, 10, 20, 30, 40, 50 and 60 ft. lengths for purchase or as 700786-1R for rent.
- Meets or exceeds Canadian Standards Association CAN/CSA-Z271
- **For use in Canada only**

Specifications:	
Weight:	136 lb (62 kg.)
Operating Range:	220V +/- 10%, 10 Amps
Operating Speed:	35 ft/min. max. (10.7 m/min. max)
Wire Rope:	3/8 in. (9.5 mm) 6 x 19, IWRC, Right Regular Lay, IPS or EIPS, Preformed, Galvanized or Bright. User must verify that the wire rope meets or exceeds applicable codes for breaking strength safety factor. Canadian standards require a 10:1 safety factor on the breaking strength.

Pendant receptacle pictured

For information on our latest Astro hoist, the Astro E2200, visit our website at http://suspended-scaffolding.spiderstaging.com/item/new-products-by-spider-staging/category-1152/astro2200

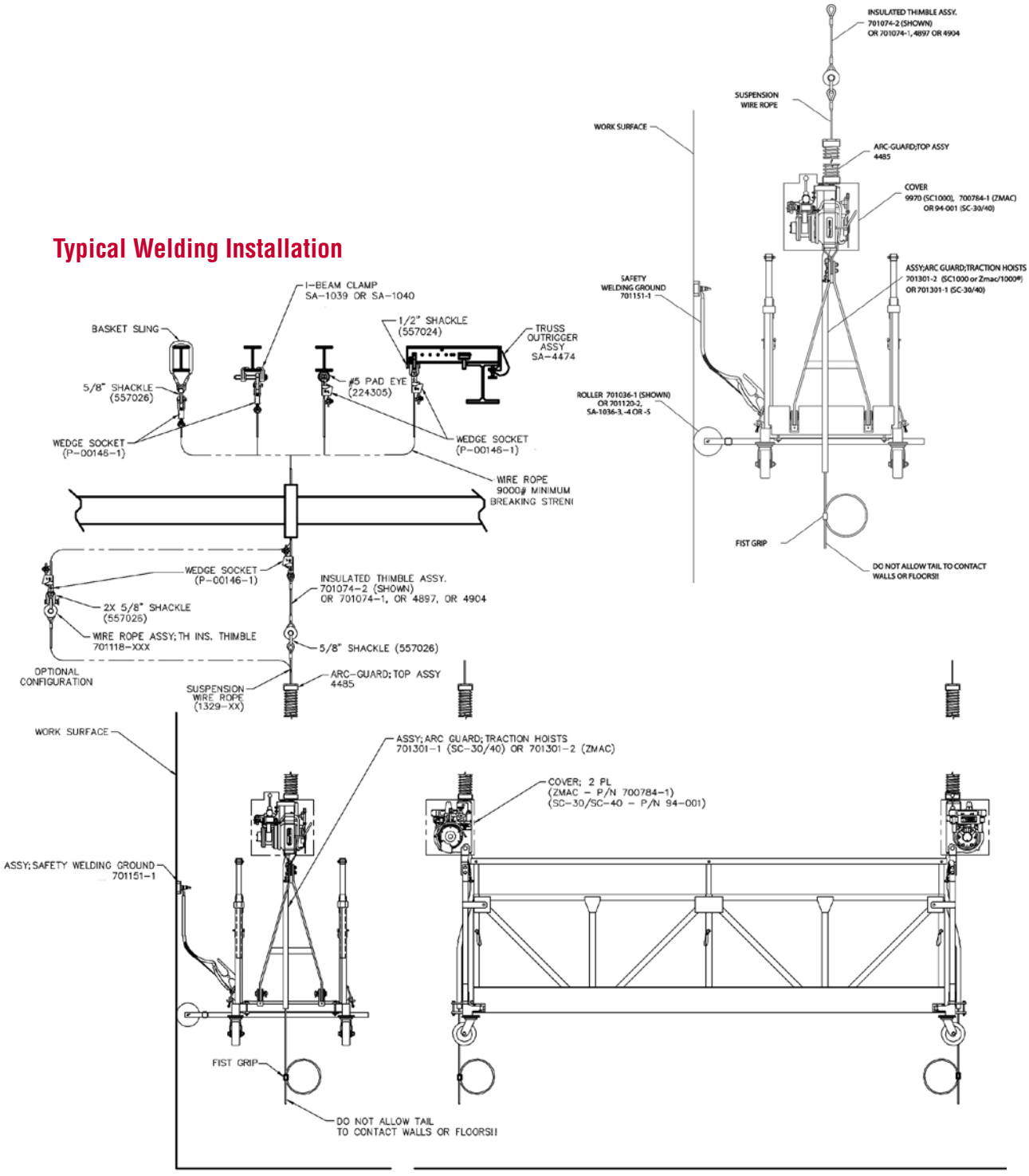
Accessories

Part Number	Description	Used With:
4485	Arc Guard Top Assembly	All hoists
94-001	Hoist Cover	SC30, SC40
9970	Hoist Cover	SC1000, SC1500
701018-1	Hoist Cover: disposable polypropylene	Zmac/1000®
700784-1	Hoist Cover: canvas	Zmac/1000®
701464-1	Stirrup Bar	Fits all traction hoists
701151-1*	Welding Ground	All hoists
701074-2**	Insulator/Thimble	All hoists
1581	Mid-Assembly Arc Guard	SC30, SC40, SC1000, Zmac/1000®, other brands of traction hoists
701301-1*	Traction Hoist Arc Guard	SC30, SC40, SC1000, SC1500
701301-2*	Zmac Arc Guard	Zmac/1000®
BB-004	Short Frame	SC30, SC40
BB-002	Long Frame	SC30, SC40
BB-012	Slack Rope Brake Assembly	SC30, SC40
8-0281-XX	Pendant Remote	Single phase, three phase and dual voltage model hoists 'XX' indicates length
4754	Transformer; 2 kVA	Consult your Spider Representative
590003	Transformer with GFI; step down; 2 kVA	Consult your Spider Representative
590012	Transformer; buck/boost; 2 kVA	Consult your Spider Representative
590023	Transformer; step up; 3 kVA	Consult your Spider Representative
8-0278	90° Adapter	SC1000 / SC1500 Corner Adapter (008812-1)
8-0406	20° Adapter	SC1000 / SC1500 Walk Thru Stirrup (008810-2)

*** See page 39 for typical installations.** **** See page 135 for all wire rope insulation & welding accessories.**

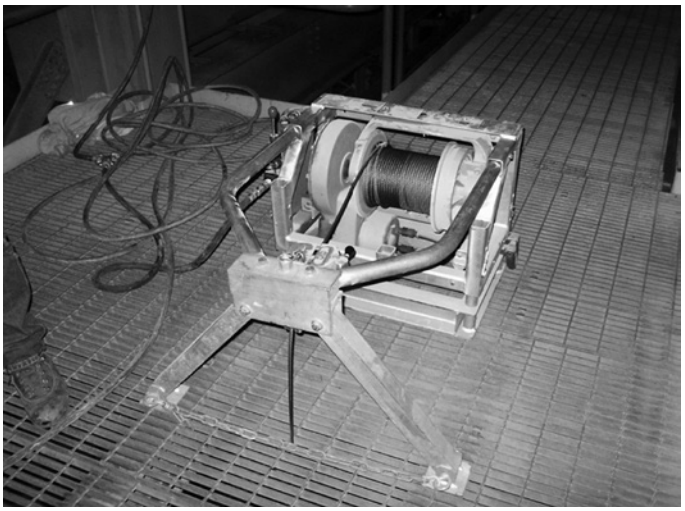
Welding Installation Details

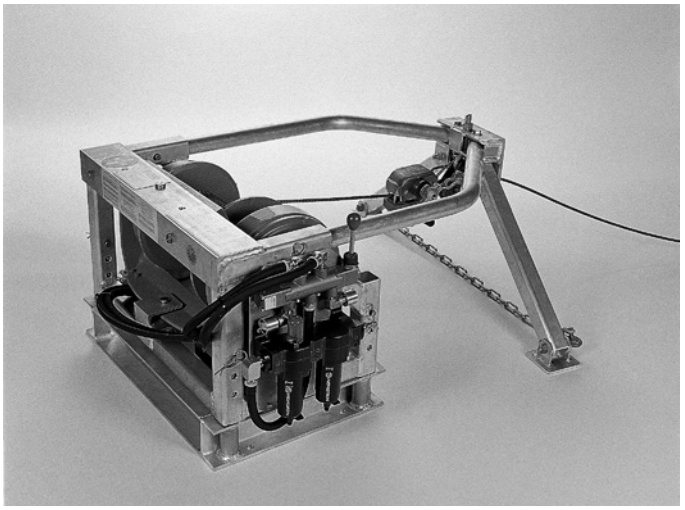
Typical Welding Installation



Call or click for more information
1-877-774-3370
www.spiderstaging.com

LSR1 Limited Space Rescue Winch (700989-1)





The LSR1 is the most comprehensive method to achieve confined space rescue for workers on swing stages inside boilers, silos, refineries, penstocks, dams, shafts, water and sewer vessels, and similar areas.

For forced outages or where the scope of work is minimal, the LSR1 provides equipment rescue, and with a second LSR1 unit installed personnel rescue which plant personnel are fully capable of installing and operating with basic training. The LSR1 helps plant owners, HSE and operations personnel achieve prompt rescue of injured workers and the very fast rescue required for electrocuted workers. The system's low cost and fast speed of set-up make it the attractive rescue solution for short duration boiler work or any confined space.

Key Features:

- Workers and equipment are lowered at the same speed – there is no risk of a platform operator left hanging in his harness above the platform.
- Easy to operate powered system to lower workers and equipment simultaneously.
- Stand-alone, self-contained, man-rated hoist and rigging
- Lightweight welded aluminum frame
- Includes level wind drum for smooth, easy wire rope wrapping
- Overload device prevents hoist from operating when loaded beyond its rated capacity.
- Built-in secondary overspeed brake
- Disassembles without tools to fit through an 18 x 24 in. (457 x 610 mm) oval opening
- Can be used directly over roof penetrations or mounted to outside structural members

Safety Considerations of LSR1:

- Reduces hazards to rescue team by eliminating need for rescue personnel to enter the boiler and work underneath potentially damaged equipment overhead.
- Limits exposure of original hazard to operators only – does not expose additional rescue personnel to risk present inside structure.
- Does not require operators and plant personnel to wait for emergency services to initiate rescue and start first aid.
- Does not rely on operators to recall extensive rope descent or other training on rarely used systems in a time of crisis.
- Allows workers to focus on self-rescue or 'buddy care.' One worker can initiate CPR on his partner while being lowered – no need to wait for external rescue team.
- Calmer professionals lower the platform and the workers simultaneously – traveling at the same speed to simplify rescue.
- Typical accessory packages reduce the risk of weld-related injuries.

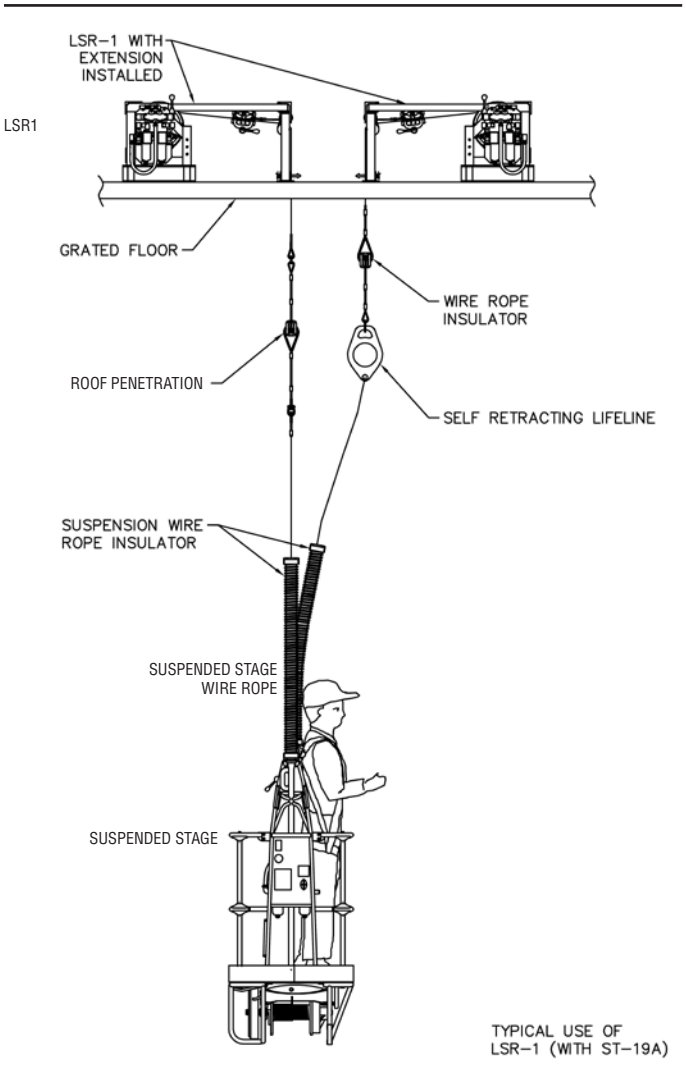
Specifications:	**700989-1**
Load/Capacity:	1,000 lb (453.6 kg)
Dimensions: **Without extension:** **Overall:**	 17.5 x 38.7 x 21 in. (445 x 983 x 533 mm) 17.5 x 42.8 x 21 in. (445 x 1,087 x 533 mm)
Weight:	165 lb (74.8 kg) without wire rope
Heaviest Piece:	149 lb (67.6 kg)
Speed:	30 ft/min (9.1 m/min)
Power Draw:	60 cfm @ 120 psi
Motor:	1.25hp Vane motor
Drum Capacity:	500 ft (152.4 m)
Wire Rope:	5/16 in. (8 mm) fiber core

Accessory equipment:

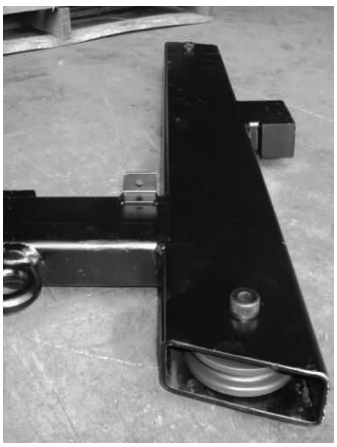
- **4897 Wire Rope Insulator**
- **701074-1 Insulated Thimble Assembly**
- **SRL**
- **Welding ground**
- **5/8 in. lifeline, wire rope lifeline**

For installation drawings, see page 23.

LSR1 Limited Space Rescue Winch (continued)



Fall Arrest Application



Engineered Sighthole Bracket for Side Mounting Using Existing Bolt Hole

No Topside Access? No Problem.

- Engineered sighthole bracket allows easier rigging when topside access isn't available.
- No penetrations required.
- Creates an 18 in. (457 mm) projection into the structure, allowing higher vertical travel and more working swath.
- For typical installation, see page 23.

Contact your Spider professional for applications information and special considerations for welding and fall protection.

Compare LSR1 to Other Rescue Options:

Prompt Rescue

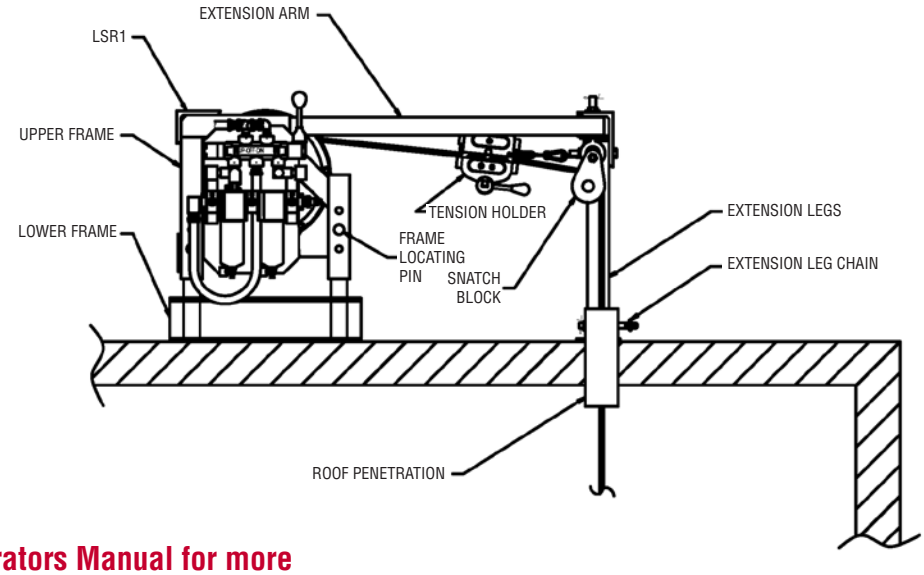
- Powered winch lowers a worker to safety
- Practical, fast and does not rely on individuals hand-cranking someone several hundred feet down

100% Tie-Off

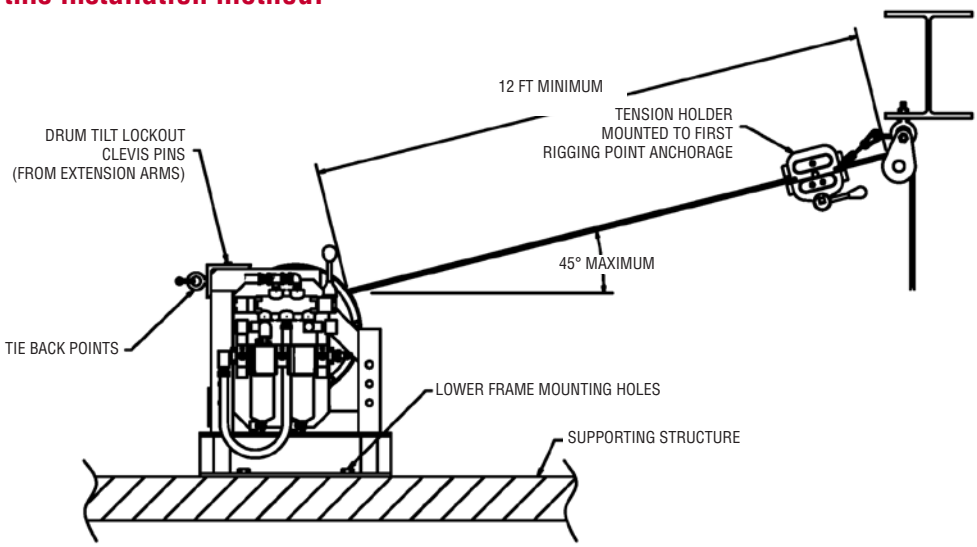
- No need to move the lifeline termination to shift an injured worker to a rescue line.

Easier to Operate

- Simpler to operate than tripod winches – one worker can operate both the equipment-bearing and personnel bearing LSR1s.
- Significantly reduces the safety monitor's labor hours.



Refer to the Operators Manual for more information on this installation method.



ST-17 Air Spider

The industry standard for work in refineries, tank farms, shipyards, offshore platforms and heavy construction has been redesigned to meet your needs and simplify your ownership experience - lowering your cost of ownership, improving the reliability of the components, and making it easier to service this product right.

Specifications:	ST-17-x-xxx
Gross Load Capacity:	1,000 lb (453.6 kg)
Dimensions:	37 x 29 x 72 in. (940 x 737 x 1,829 mm)
Weight:	ST-17: 209 lb (94.8 kg) ST-17-1: 210 lb (95.3 kg)
Travel Speed:	30 ft/min (9.2 m/min)
Power Requirements:	120 psi air @ 60 cfm
Wire Rope Capacity:	ST-17: 500 ft (152.4 m) ST-17-1: 1,000 ft (304.8 m)
Wire Rope Size and Construction:	5/16 in. (8 mm) Seale Construction 6 x 19
Construction:	Aluminum and steel

Key Features:

- Air-powered motor
- Reinforced midair transfer point and wear plates at base
- Winding drum hoist offers safe, efficient operation in hazardous and corrosive environments.
- Paint and blast media on wire rope do not impact operation of unit.
- Reliable vented transmission prohibits entry of corrosive agents for greater durability.
- Constant pressure versa valve ensures complete, immediate stop on release of operating lever.
- Built-in breather vent kit
- Simpler wire rope changes
- Simpler service
- Reusable wear parts
- Fairlead guide replaces steel wire rope guides
  - 2 mating universal pieces extend life 4 times that of prior design.
  - Wear guide that indicates replacement interval
  - Polymer material resists corrosion
  - Retrofitable to prior ST-17/19/180 models
- Tension holder assembly
  - Simple polymer assy
  - Replaces service intensive SA-1077 by reducing number of parts from 44 to just 16
  - Simple test shows when to replace tension blocks
  - Retrofitable to ST-17/19/180 models
- More robust and reliable oiler/filter lubricator assembly
  - Easier mounting
  - More robust mounting bracket
  - Better visual management
  - Improved serviceability from special lubricants that decrease maintenance time for equipment used in harsh industrial environments

For welding installation details, see pages 63-64.

"I have just received another Spider basket on my offshore rig. I have ordered a Spider basket for every rig I am assigned to and use the Spiders very successfully. My first job offshore was on a spy ship named the Hughes Glomar Explorer in 1974. We were raising a sunken Russian submarine and had 2 Spider baskets onboard the ship for that mission. Thanks for 36 years of working with Spider – it is a great product."

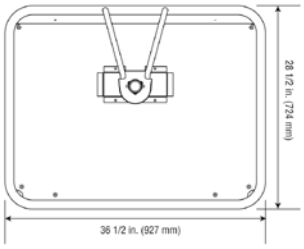
- Glenn T. Clemens, Barge Capt
West Pealut

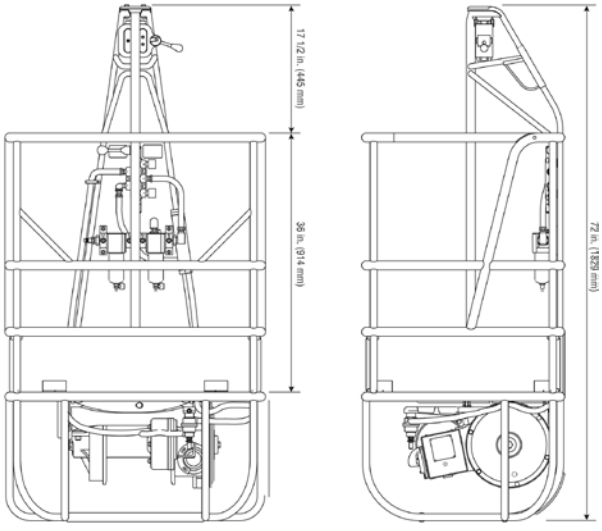
Spider has also developed 8 variations of the popular ST-17.

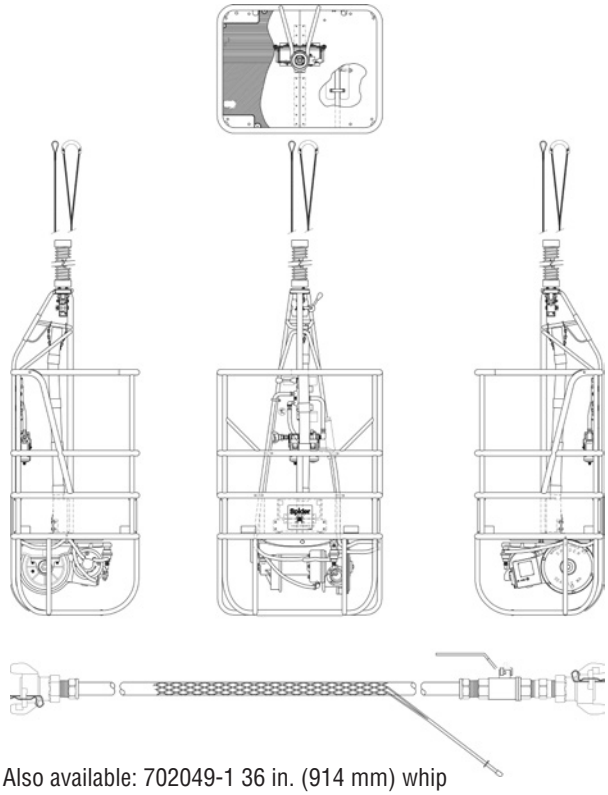
- **ST-17-3-XXX** **Aluminum Cage, Thimble**
- **ST-17-4-XXX** **Aluminum Cage, 18 in. Eye Splice**
- **ST-17-5-XXX** **Aluminum Cage, Thimble, Arc Guard Kit**
- **ST-17-6-XXX** **Aluminum Cage, 18 in. Eye Splice, Arc Guard Kit**
- **ST-17-7-XXX** **SST Cage, Thimble**
- **ST-17-8-XXX** **SST Cage, 18 in. Eye Splice**
- **ST-17-9-XXX** **SST Cage, Thimble, Arc Guard Kit**
- **ST-17-10-XXX** **SST Cage, 18 in. Eye Splice, Arc Guard Kit**

'SST' refers to stainless steel frame and fasteners

'XXX' indicates the wire rope length which ranges from 100 ft (30.5 m) to 350 ft (91.4 m) in 50 ft (15.2 m) increments. Call Spider for details.







Also available: 702049-1 36 in. (914 mm) whip

Frequently used accessories:

- **SA-1002 Transfer Chain on page 125.**
- **SA-1083 Drum Hoist Arc Guard Kit on page 67.**
- **SA-1051 Flydeck on page 68.**

Take the Spider Test!

Protect your interests by educating yourself before you buy. Ask your supplier to verify their product's quality compared to the Spider ST-17.

Key Features:	Benefits:	Competitive equipment may offer:	Your purchased or rented unit matching ST-17 features:	Required by Law:
UL Listing	• Assures design and manufacturing integrity • Reduces user liability of non-certified equipment • Use complies with OSHA regulations • **UL File #SA-5062 originated, owned and maintained by Spider - verify it at www.UL.com.**	No UL listing		OSHA 1910.28(i)(1) & (g)(3); Hoists must be tested and listed by nationally recognized testing laboratory.
Overspeed brake in drum	• Stops travel within 12 in. (305 mm) when descent beyond rated speed is sensed • Brake also engages during changes in momentum	No overspeed brake in drum		OSHA 1926(i)(4) requires primary brake and emergency brake which engages automatically when normal descent speed is exceeded.
Full OSHA/ANSI compliance	• Meets or exceeds the applicable OSHA and ANSI standards for suspended scaffolds	Does not meet OSHA/ANSI		Yes
Inspection port in transmission	• Permits visual inspection of gears for wear without disassembling the transmission	No inspection port in transmission		No. Maintenance per manufacturer's recommendation is required.
Solid aluminum bar stock tripod and aluminum chain guard	• Adds strength for mid-air transfers • Eliminates galvanic corrosion of the tripod, increasing the life of the hoist in corrosive environments	Hollow tubing used for tripod and steel (dissimilar material) used for chain guards		No
New original qualified parts	• Ensures smooth operation and increases durability	Parts are remanufactured in hoists marketed as new.		No. In many jurisdictions, Uniform Commercial Code prohibits sale of remanufactured products as new.
Bracing design on back side of unit allows easy access	• Unencumbered access between mid rail and top rail makes wire rope installation easier.	Bracing on back side same as front side – makes access difficult		Yes. Employers are required to provide a safe work place.
Engineered guide ring saves time	• Less wear on wire rope reduces cost. • Engineered polymer guide disc has built-in wear gauge to identify replacement interval. • Reversible design doubles assembly life. • Large opening eliminates disassembly during wire rope replacement.	Guide ring assembly only includes one steel guide ring, which increases wear.		No
Barbed fittings	• More secure, durable and safer form of hose termination • Eliminates cutting hazard and untimely disconnects	Hose clamps		No. Some refineries and other facility owners prohibit the use of hose clamps.
Industry leading manufacturer	• Product backed by one of the strongest product liability insurance coverages in the industry • Certificate of General Liability Coverage provided within 24 hours of request • Spider introduced the drum hoist to the industry in 1946 and has operated continuously for over 65 years. • Product design updates, as released in 2002 and 2008	Check before you buy.		No. Relying on uninsured or under-insured vendors increases risk and can affect your insurance rates.

All Hoists Are Not REcreated Equally

Don't be fooled. There are a lot of imitators out there but only one Spider. Many have attempted to replicate our ST-17 work basket, but copy cats don't come close to the original. Protect your interests by educating yourself before you buy or rent. Here are a few things that make Spider's ST-17 the one and only…Don't settle for anything less than the original Spider ST-17 work basket.

Fact: The Spider ST-17 is THE invention that started the powered access industry in the 1940s, forever changing the way work at high elevations is accessed.

Fact: Production of the ST-17 has been steady since the 1940s, deeming the production of this hoist the longest running in the industry.

Fact: Only Spider's drum hoists are UL listed.

Fact: Spider's 24 operation centers in the Americas are the only locations where hoists are repaired using a 116 point checklist and genuine OEM (original equipment manufacturer) parts by factory-trained qualified technicians working under expert supervision.

Fact: Spider utilizes a coordinate measuring machine that verifies production standards for the close tolerance mechanical components of our hoists, so you can be certain every part has met exacting specifications. UL employees personally inspect our production regularly to assure compliance to the tested product UL listed for safety and reliability. See why UL matters below.

Fact: Several ST-17s that were produced over fifty years ago, including our serial number TA-0112 built in 1950, are still in our rental fleet today. That's how we define reliability.

Fact: For more than 65 years, Spider has continuously updated, improved and modified the ST-17 model to improve ease of use and serviceability and to meet current regulation requirements.

Fact: Spider's ST-17 and the work our factory-trained certified technicians perform is backed by the strongest liability insurance in the industry - $21 million in coverage by A15+ rated AIG.

Spider invests in UL and CUL Certification for your Safety

Spider designs, engineers, builds and tests its hoists in accordance with the Underwriters Laboratories UL1323 standard for hoists as required by OSHA under OSHA 1910.28(i)(1) & (g)(3) and 1926.451(d)(13). Employers are required under OSHA to use hoists tested by both a Nationally Recognized Testing Laboratory and a Qualified Testing Laboratory, depending on which code section applies. Underwriters Laboratory (UL) is one of three Nationally Recognized Testing Laboratories accredited to test to the UL1323 standard.

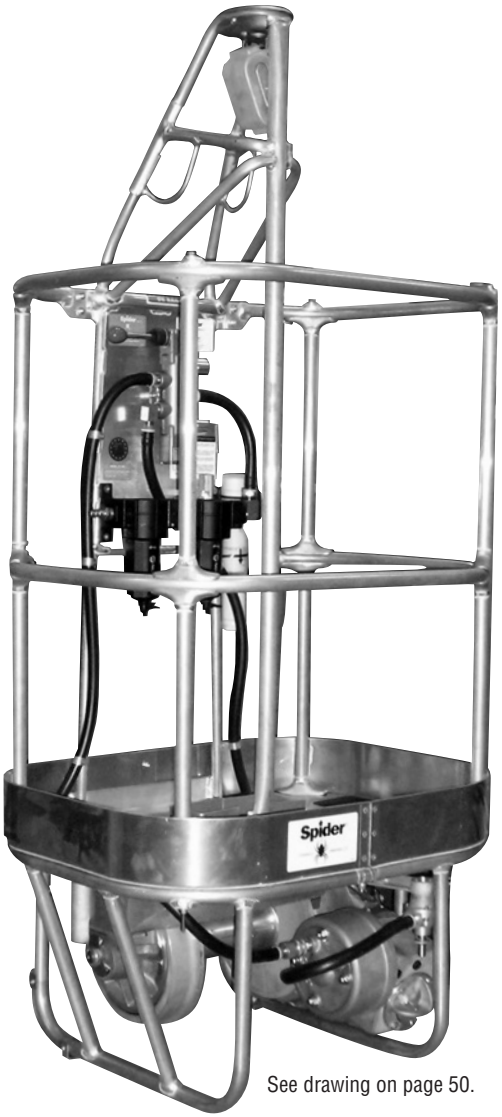
Spider makes the choice to list our hoists with UL® because it provides **Spider equipment users** equipment that is safer than products listed by other labs. This gives Spider customers peace of mind. UL® interprets the UL1323 test standard with the intent from which this code was written and rigorously applies the UL1323 code to its initial performance testing protocol and its ongoing certification program.

Not all manufacturers invest in UL listing. **Our hoists are UL® listed.** To verify the listing status, visit www.UL.com, choose Certifications, and enter SafeWorks as the company name. Choose TUFV.SA5062 to see that SafeWorks earned its UL Classification and continues to maintain this listing.

Examiners employed by Underwriters Laboratories regularly inspect our hoists during production in our factories to verify consistent sustained production of the products as designed and originally tested and listed. This drives a **safer, more reliable product for our users.**

The ST-17 is the finest quality work basket in the world and is a result of years of improvements, primarily from customer feedback.

ST-19A Demountable Air Spider



See drawing on page 50.

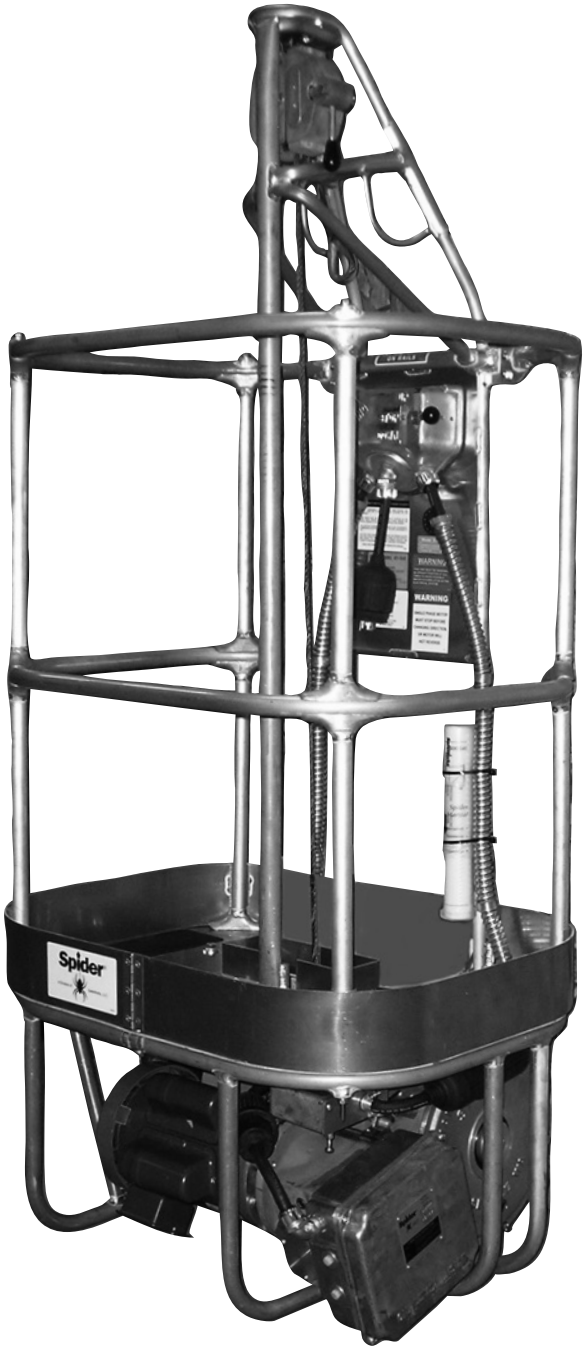
All the same performance benefits of the ST-17 in a demountable platform for easy disassembly to pass through a 20 in. (508 mm) opening.

- Bolted, lightweight aluminum frame quickly disassembles, making it ideal for limited access work in boilers, digesters, grain elevators, ships, tanks and stacks.
- Air powered motor
- Reliable vented transmission prohibits entry of corrosive agents for greater durability.
- Reinforced midair transfer point and wear plates at base
- Optional 2 ft (0.6 m) SA-1052 and 3 ft (0.9 m) SA-1053 flydecks

Specifications:	ST-19A
Gross Load Capacity:	1,000 lb (453.6 kg)
Dimensions:	30 x 23 x 70 in. (762 x 584 x 1,778 mm)
Weight:	205 lb (93 kg)
Travel Speed:	30 ft/min (9.2 m/min)
Power Requirements:	120 psi air @ 60 cfm
Wire Rope Capacity:	500 ft (152.4 m)
Wire Rope Size and Construction:	5/16 in. (8 mm) Seale Construction 6 x 19
Construction:	Aluminum and steel

For welding installation details, see pages 63-64.

ST-19E Demountable Spider



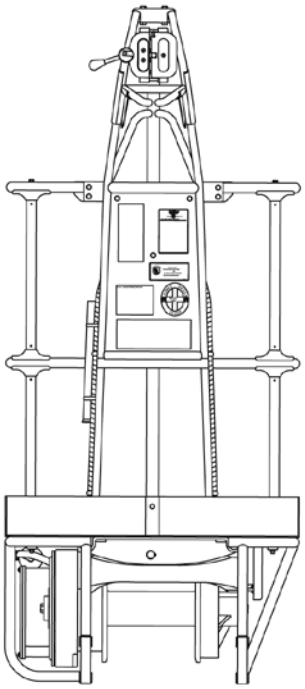
Self-contained work cage easily disassembles without special tools to pass through a 20 in. (508 mm) diameter opening.

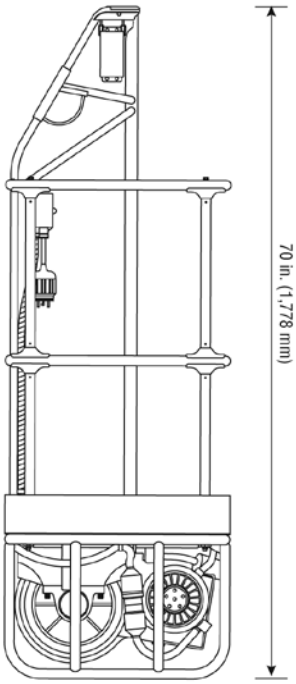
- Bolted, lightweight aluminum frame is ideal for limited access work in boilers, ships, tanks and stacks.
- Built-in overload device and overspeed brake
- Reinforced midair transfer point and wear plates at base
- Optional 2 ft (0.6 m) SA-1052 and 3 ft (0.9 m) SA-1053 flydecks
- **Available in rental fleet and for sale on a special order basis**

Specifications:	ST-19E
Gross Load Capacity:	1,000 lb (453.6 kg)
Dimensions:	30 x 23 x 70 in. (762 x 584 x 1,778 mm)
Weight:	205 lb (93 kg)
Travel Speed:	18 ft/min (5.5 m/min)
Voltage Options:	115V single phase (50 and 60Hz models available)
Wire Rope Capacity:	350 ft (106.7 m)
Wire Rope Size and Construction:	5/16 in. (8 mm) Seale Construction 6 x 19
Construction:	Aluminum and steel

For welding installation details, see pages 63-64.

ST-19E

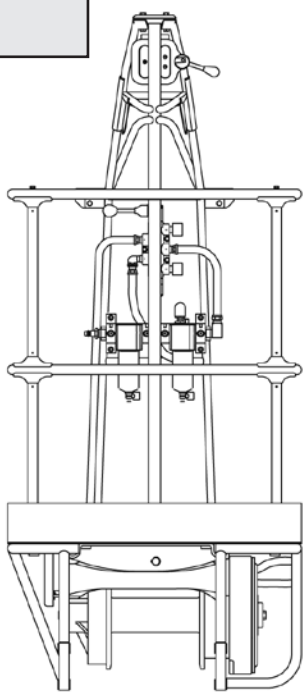


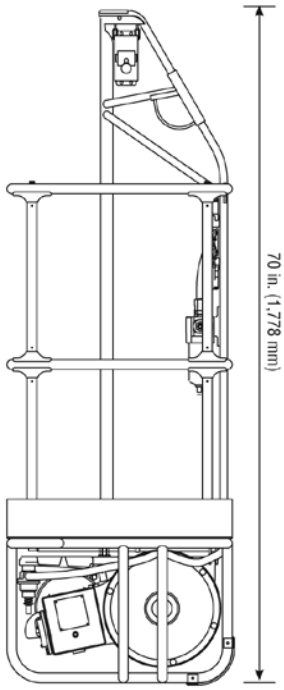


Frequently used accessories:

- **SA-3065 Ground Dolly on page 67.**
- **SA-1002 Transfer Chain on page 125.**
- **702049 Whip on page 45.**

ST-19A





Notes

ST-26 Mini Spider

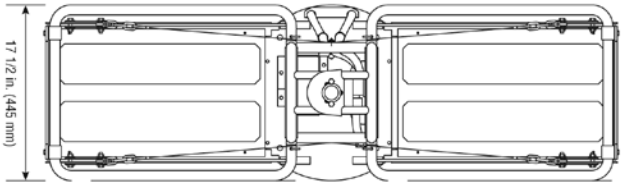
The ST-26 is the product of choice for work in stacks, ship holds, boilers, digesters, power plants and similar areas with limited access, where a trailing wire rope can be a hazard.

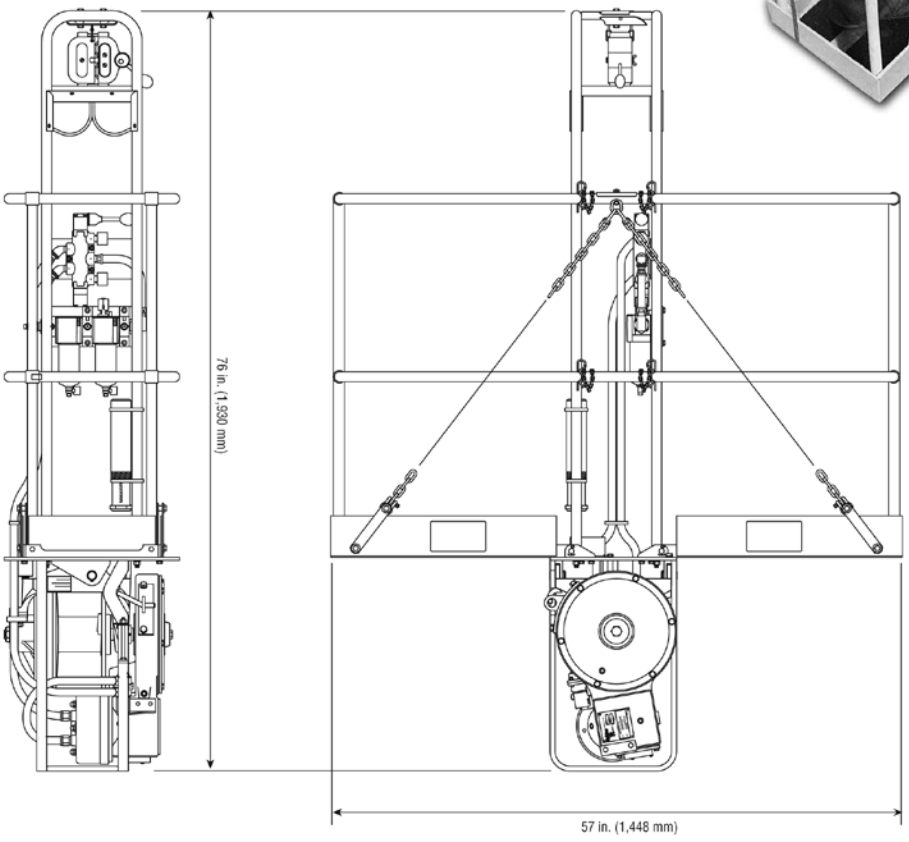
- Has the capacity to carry two people
- Air-powered motor
- Reliable vented transmission prohibits entry of corrosive agents for greater durability.
- Reinforced midair transfer point
- Passes through an 18 in. (457 mm) circular opening
- Also available in larger dimensions with an electric motor by special order

Specifications:	ST-26
Gross Load Capacity:	1,000 lb (453.6 kg)
Dimensions:	Open: 57 x 17 1/2 x 76 in. (1,448 x 445 x 1,930 mm) Folded: 13 1/2 x 17 1/2 x 76 in. (343 x 445 x 1,930 mm)
Weight:	180 lb (81.7 kg)
Travel Speed:	30 ft/min (9.2 m/min)
Power Requirements:	120 psi air @ 60 cfm
Drum Capacity:	235 ft (72 m)
Wire Rope Size and Construction:	5/16 in. (8 mm) Seale Construction 6 x 19
Construction:	Aluminum and steel

For welding installation details, see pages 63-64.

ST-26 attached to platforms





Frequently used accessories:

- **SA-1002 Transfer Chain on page 125.**
- **SA-1083-26 Drum Hoist Arc Guard Kit on page 67.**
- **702049 Whip on page 45.**

ST-180 Electric Spider

Durable, efficient transmission offers workhorse performance with minimal parts and maintenance.

- Controlled descent at half rated speed during power loss
- Long-lasting electromagnetic brake; always engaged when power is off
- Built-in overload sensor and overspeed brake
- Reinforced midair transfer point and wear plates at base
- Hour meter records operating hours for maintenance tracking

A self-contained, single line unit, the ST-180 features a working swath of 8 ft (2.4 m). Adding flydecks enlarges the ST-180 to 14 ft (4.3 m), accommodating two workers to double productivity. Contractors can add modular platforms or plank sections between two ST-180s to form a double line suspended scaffold. With modular sections, workers can quickly connect sections without special tools to create a maximum reachable working swath of 56 or 62 ft (17.1 or 18.9 m) with flydecks attached. The unit comes equipped with numerous safety devices to ensure safe operation.

Key Features:

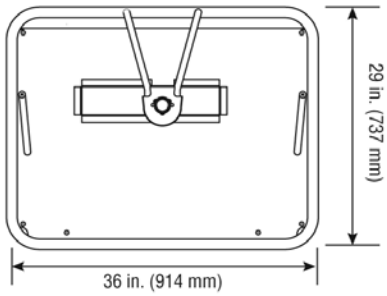
- Electromagnetic-actuated primary brake engages whenever power is off.
- Automated emergency brake engages in the event of sudden or excessive downward acceleration.
- Overload limit switch halts upward travel when hoist is overloaded.
- Durable, efficient transmission exceeds industry performance expectations.
- Motor and winch are mounted below deck to reduce workspace obstructions and protect components from hazards in the work environment. The drive unit creates a low center of gravity for the work cage, providing greater protection and stability.
- Level winding winch automatically and neatly stores wire rope on drum, eliminating dangling wire rope tails, ground hazards and premature rope replacement.
- Wire rope positively attaches to the drum with swaged-on cable drum hook and is supplied with thimble eye on the rigging end.
- Specially designed control lever for easy operation
- Reinforced midair transfer point
- Reliable vented transmission prohibits entry of corrosive agents for greater durability.
- **1,000 ft version available in rental fleet only.**

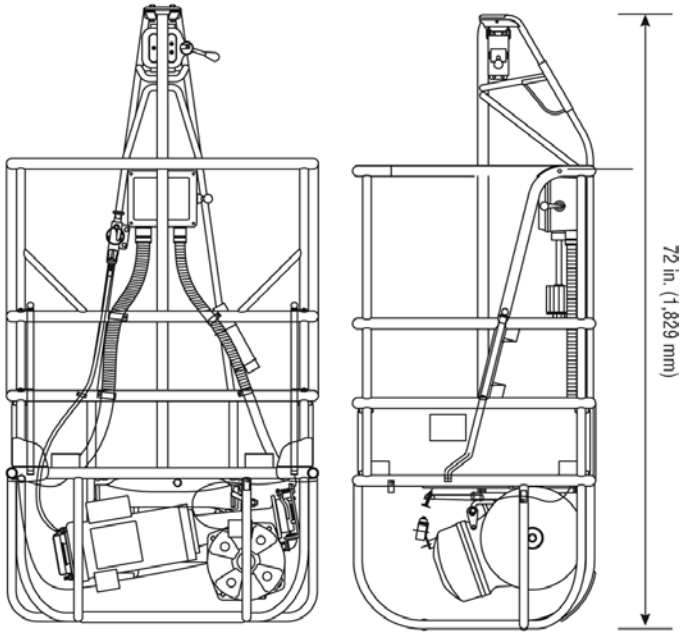
Specifications:	**ST-180**
Model numbers for different voltages and capacities are listed in the Hoist Comparison Table on page 25.	
Gross Load Capacity:	1,250 lb (567 kg)
Dimensions:	37 x 29 x 72 in. (940 x 737 x 1,829 mm)
Weight:	Base model weight of 260 lb (117.9 kg) See Hoist Comparison Table on page 25.
Travel Speed:	30 ft/min (9.2 m/min)
Voltage Options:	220V single phase and 208V three phase (50 and 60Hz models available)
Drum Capacity:	500 or 1,000 ft (152 or 304 m)
Wire Rope Size and Construction:	5/16 in. (8 mm) Seale Construction 6 x 19
Construction:	Aluminum and steel

For welding installation details, see pages 63-64.

Frequently used accessories:

- **SA-1072 Ground Dolly on page 67.**
- **SA-1036-3 Face Roller on page 66.**





Collapsible Aluminum Work Cage (700903-1)

The Collapsible Work Cage from Spider is a lightweight, full size cage that disassembles without tools.

It can pass through an 18 in. (457 mm) circular opening. Just one work cage offers the load rating and deck space of a full size cage and the compact size and easy disassembly of a restricted access platform. Low center of gravity provides a more stable work surface.

- Spider dependability
- Compatible with Zmac/1000®, SC1000, SC40, SC30 and other brand traction hoists
- Lightweight aluminum extrusion construction
- After disassembly, all pieces fit through an 18 in. (457 mm) opening
- Heaviest component is 60 lb (27.2 kg)
- Meets and/or exceeds OSHA & ANSI requirements

Key features:

- Easy disassembly without tools
- Aluminum construction
- Pin-style removal of sheave to speed wire rope reeving
- Lifting transfer lug acts as transfer rigging point; allows for crane lifting or horizontal travel with SA-1002 Transfer Chain
- Optional flydeck kits include complete replacement floor and handrail.

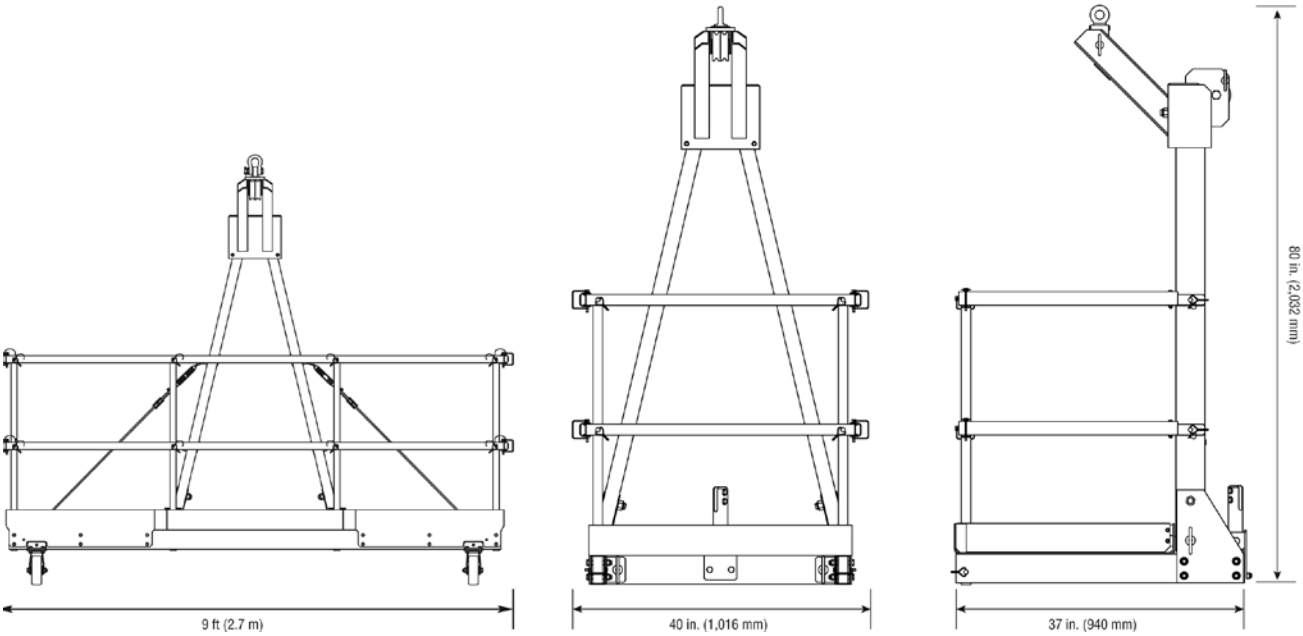
For welding installation details, see pages 63-64.

For flydecks, see page 68.

Specifications	700903-1
Gross Load Capacity:	1,000 lb (453.6 kg)
Dimensions:	40 x 37 x 80 in. (1,016 x 940 x 2,032 mm)
Dimensions with 2 ft (0.6 m) Flydecks:	43 x 85 x 80 in. (1,092 x 2,159 x 2,032 mm)
Workspace Dimensions:	28 x 36 x 72 in. (711 x 914 x 1,829 mm)
Unit Weight without / with Flydecks:	150 lb (68 kg) / 250 lb (113.4 kg)
Maximum Live Load:	750 lb (340.2 kg)
Maximum Live Load with Flydecks:	500 lb (226.8 kg)

Disassembly steps:
- Remove hinged deck and handrails
- Collapse mast
- Pass all through 18 in. (457 mm) circular opening

Optional Equipment:
- Face Rollers (701037-1)
- Casters (700907-2)
- Optional flydecks (700934-1): special order only



Shown with optional flydecks to create a 9 ft (2.7 m) work cage

Call or click for more information
1-877-774-3370
www.spiderstaging.com

Steel Work Cage (701086-1)

The Steel Work Cage is the most durable cage, field proven by Spider's rental fleet to last.

- Spider dependability
- Compatible with SC1000, Zmac/1000®, SC40, SC30 and other brand traction hoists
- Durable, welded steel construction
- Guardrails have rounded corners and access gates
- Fits through standard 36 in. (914 mm) doorway
- Lifting/transfer lug

Key features:

- Rugged steel construction
- Pin-style removal of sheave to speed wire rope reeving
- Lifting/transfer lug acts as transfer rigging point; allows for crane lifting or horizontal travel with SA-1002 Transfer Chain
- Casters included as standard equipment

See page 133 for our Safety Welding Ground 701151-1 for use with this work cage.

Specifications	701086-1
Gross Load Capacity:	1,000 lb (453.6 kg)
Dimensions:	36 x 33 x 91 in. (914 x 838 x 2,311 mm)
Dimensions with 2 ft (0.6 m) Flydecks:	84 x 33 x 91 in. (2,134 x 838 x 2,311 mm)
Unit Weight without / with Flydecks:	150 lb (68 kg) / 250 lb (113.4 kg)
Maximum Live Load:	750 lb (340.2 kg)
Maximum Live Load with Flydecks:	500 lb (226.8 kg)

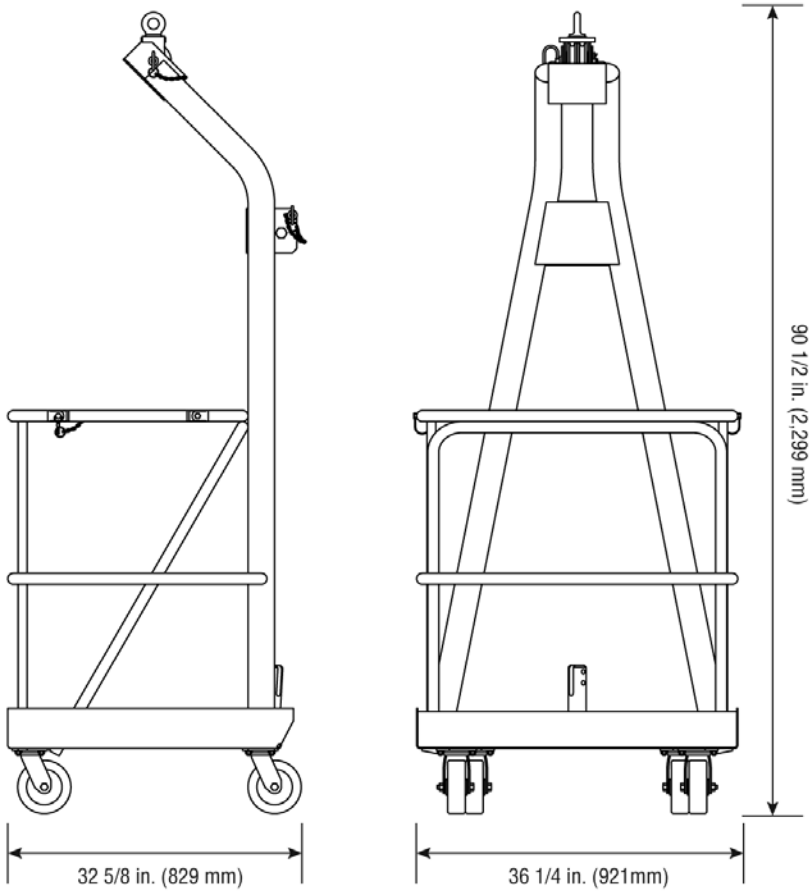
Pin-style sheave connection reduces rigging time for both the 700903-1 and 701086-1 work cages.

Frequently used accessories:

SA-1002 Transfer Chain to move work cage horizontally. See page 125.

Additional optional equipment:

- **Face Rollers (SA-1035; SA-1036-3; SA-1036-4; SA-1036-5)**
- **Flydecks to provide 7 ft (2.1 m) work space (SA-1050)**
- **Flydecks to provide 9 ft (2.7 m) work space (SA-1051).**



Fold-Up Work Cage (P-00130)

6 ft (1.8 m) Internal Universal Mount Work Cage

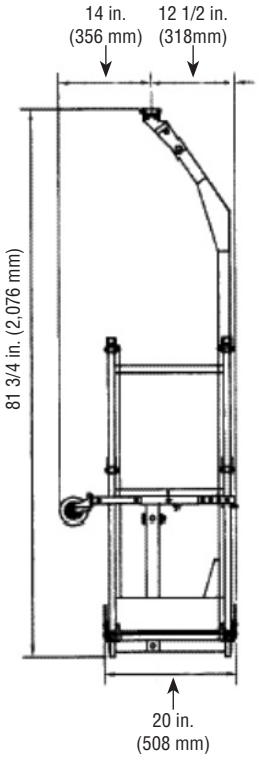
- Steel construction
- Compatible with SC1000, Zmac/1000®, SC40, SC30 and most brands of traction hoist

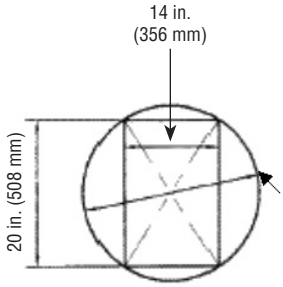
Key features:

- Lightweight
- Compact
- Easy assembly
- Powder-coated to prevent rust and lengthen product life
- Folds up for easy storage
- Mesh floors allow water to escape rather than collect in the cage – eliminates possibility of warping and reduces potential electrical problems
- Includes roller bumpers and attached tailboards that do not need to be disassembled before storage
- Passes through a 24 in. (610 mm) diameter opening or through a 13 x 20 in. (330 x 508 mm) rectangular opening
- The toe boards are permanently attached.
- The gooseneck has a roller system for the wire rope guide.
- The rollers are attached with mounted brackets instead of U-bolts.

For welding installation details, see pages 63-64.

Specifications:	Gross Load Capacity:	Dimensions: Fully Expanded	Collapsed	Weight:	Maximum Live Load:
P-00130-1 8 ft. (2.4 m) Internal Mount	1,000 lb (453.6 kg)	96 x 19 7/8 x 81 1/2 in. (2440 x 505 x 2070 mm)	14 x 19 7/8 x 88 5/8 in. (356 x 505 x 2250 mm)	163 lb (73.9 kg)	500 lb (226.8 kg)
P-00130-2 8 ft. (2.4 m) External Mount	1,000 lb (453.6 kg)	96 x 25 1/8 x 82 5/32 in. (2440 x 638 x 2090 mm)	14 x 25 1/8 x 88 5/8 in. (356 x 638 x 2250 mm)	168 lb (76.2 kg)	500 lb (226.8 kg)
P-00130-3 6 ft. (1.8 m) Internal Mount	1,000 lb (453.6 kg)	72 x 19 7/8 x 81 1/2 in. (1830 x 505 x 2070 mm)	14 x 19 7/8 x 81 1/2 in. (356 x 505 x 2070 mm)	151 lb (68.5 kg)	500 lb (226.8 kg)
P-00130-4 6 ft. (1.8 m) External Mount	1,000 lb (453.6 kg)	72 x 25 1/8 x 82 5/32 in. (1830 x 638 x 2090 mm)	14 x 25 1/8 x 82 5/32 in. (356 x 638 x 2090 mm)	156 lb (70.8 kg)	500 lb (226.8 kg)
P-00130-5 4 ft. (1.2 m) External Mount	1,000 lb (453.6 kg)	48 x 25 1/8 x 82 5/32 in. (1220 x 638 x 2090 mm)	14 x 25 1/8 x 82 5/32 in. (356 x 638 x 2090 mm	132 lb (59.9 kg)	500 lb (226.8 kg)





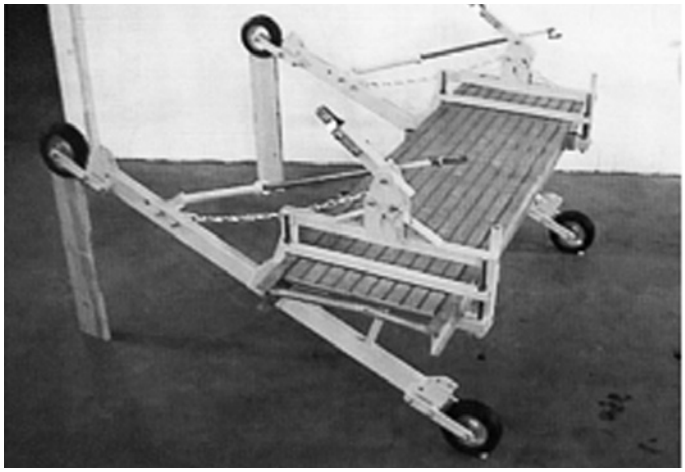
Minimum size opening for work basket to pass through is 24 in. (610 mm) diameter opening or 14 in. (356 mm) x 20 in. (508 mm) rectangular opening.

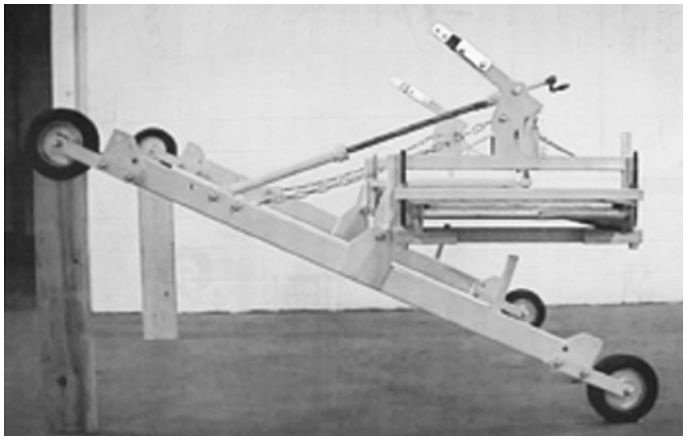
6 ft (1.8 m) Internal Universal Mount

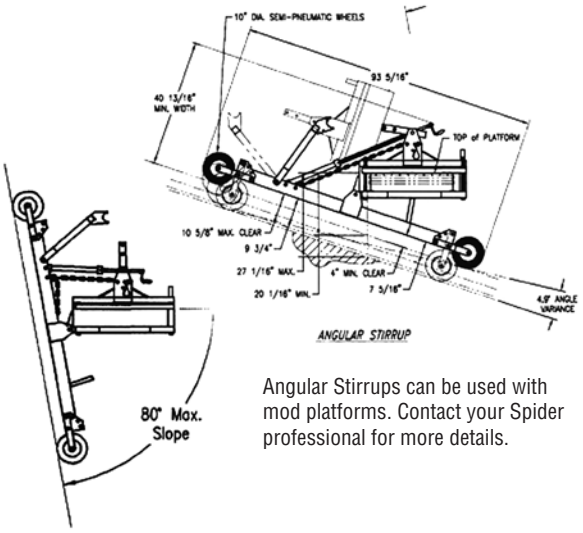
6 ft (1.8 m) Internal Universal Mount, shown folded for storage or opening

6 ft. (1.8 m) Internal Universal Mount Work Cage is depicted, but various models are available. See specifications on page 60 or call Spider for details: 1-877-774-3370.

Angular Stirrups (P-00247-201)







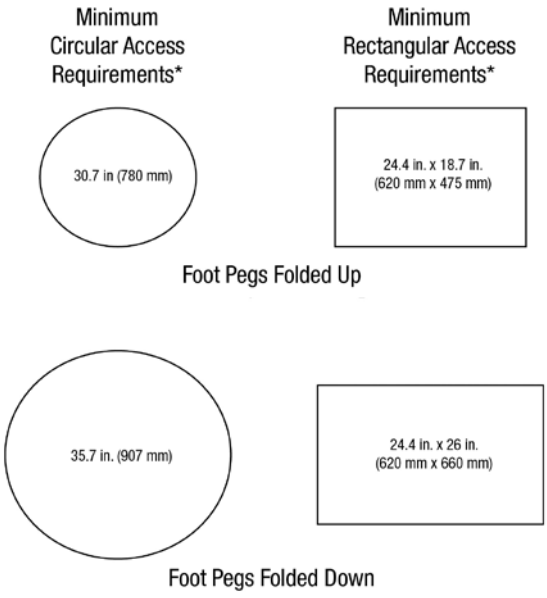
Angular Stirrups can be used with mod platforms. Contact your Spider professional for more details.

Bosun Chair (9-73 and 710272-1)

Spider's Bosun Chair uses the Zmac/1000®, SC30 and SC40 series hoists, as well as other brands' traction hoists. Additionally, the 710272-1 Bosun Chair can accommodate the SC1000 series traction hoists when using the 90 degree adapter, 8-0278.

The hoist mounts directly below the seat of the bosun chair. The wire rope enters at the top of the mast between the roller and the inside of the mast tube. The space between the two rollers at the top of the mast is designed for a secondary wire rope on a different hoist. At all times, the wire ropes enter the top of the mast in a straight vertical alignment. There is no reason to bend the wire rope or change its direction. As the wire rope leaves the hoist, it moves downward in a straight vertical movement through the space created on the bottom of the chair.

- Steel and molded polymer construction

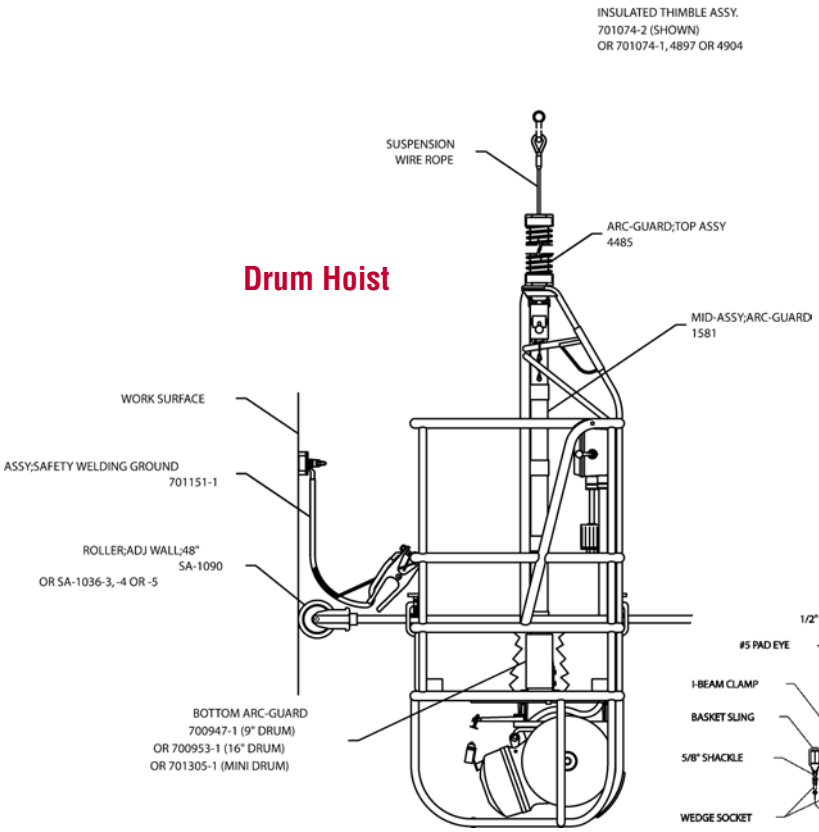


* Dimensions expressed when hoist is mounted to chair.

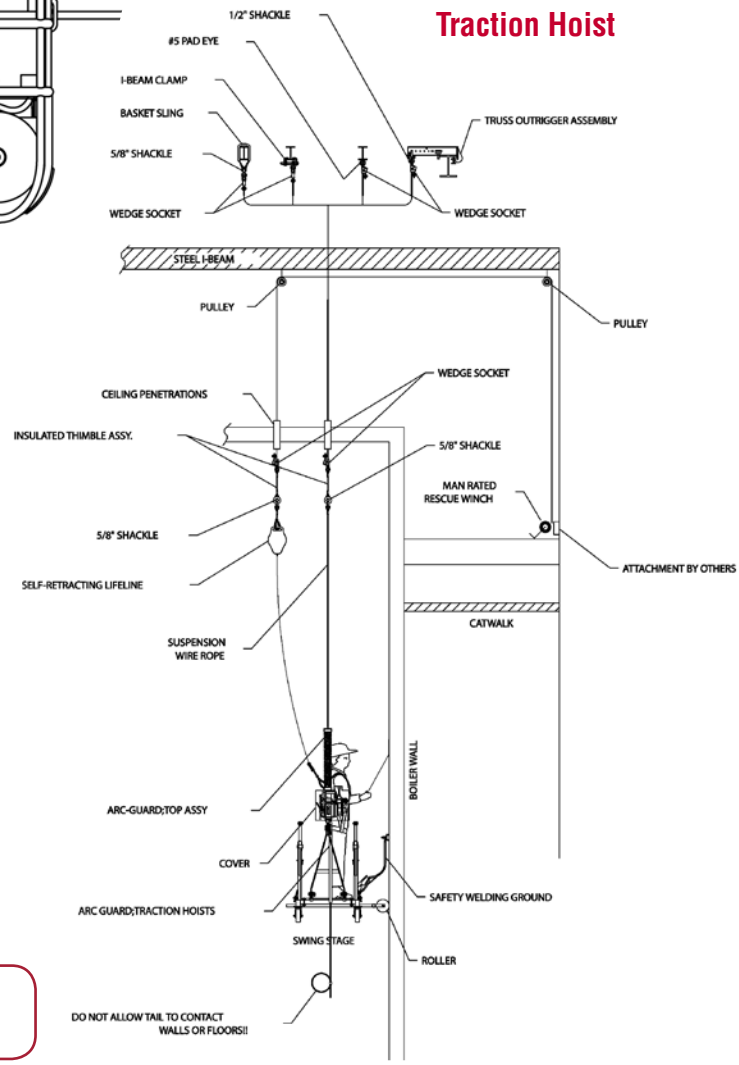
Specifications	9-73	710272-1
Live Load Capacity:	250 lb (113.4 kg) – one person	250 lb (113.4 kg) – one person
Dimensions:		
From base of chair to top of mast	63 in. (1,600 mm)	64.75 in. (1,645 mm)
From outside of caster to back of lower frame	24.4 in. (620 mm)	24.4 in. (620 mm)
Outside width at casters	18.7 in. (475 mm)	18.7 in. (475 mm)
Outside width with foot pegs down	26 in. (660 mm)	26 in. (660 mm)
Weight without hoist:	38 lbs (17.2 kg)	38 lbs (17.2 kg)

Welding Installation Overview

Drum Hoist

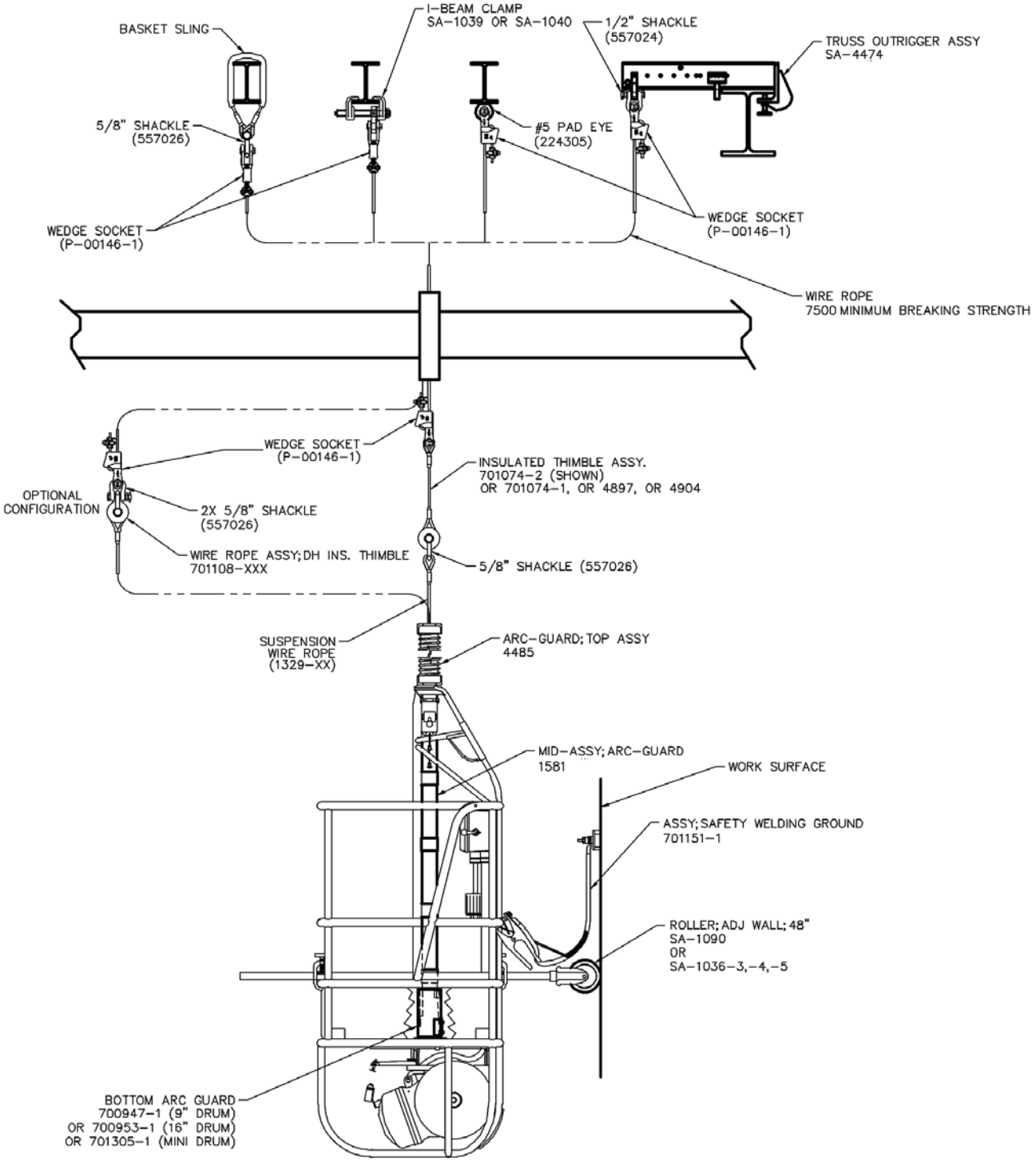


Traction Hoist

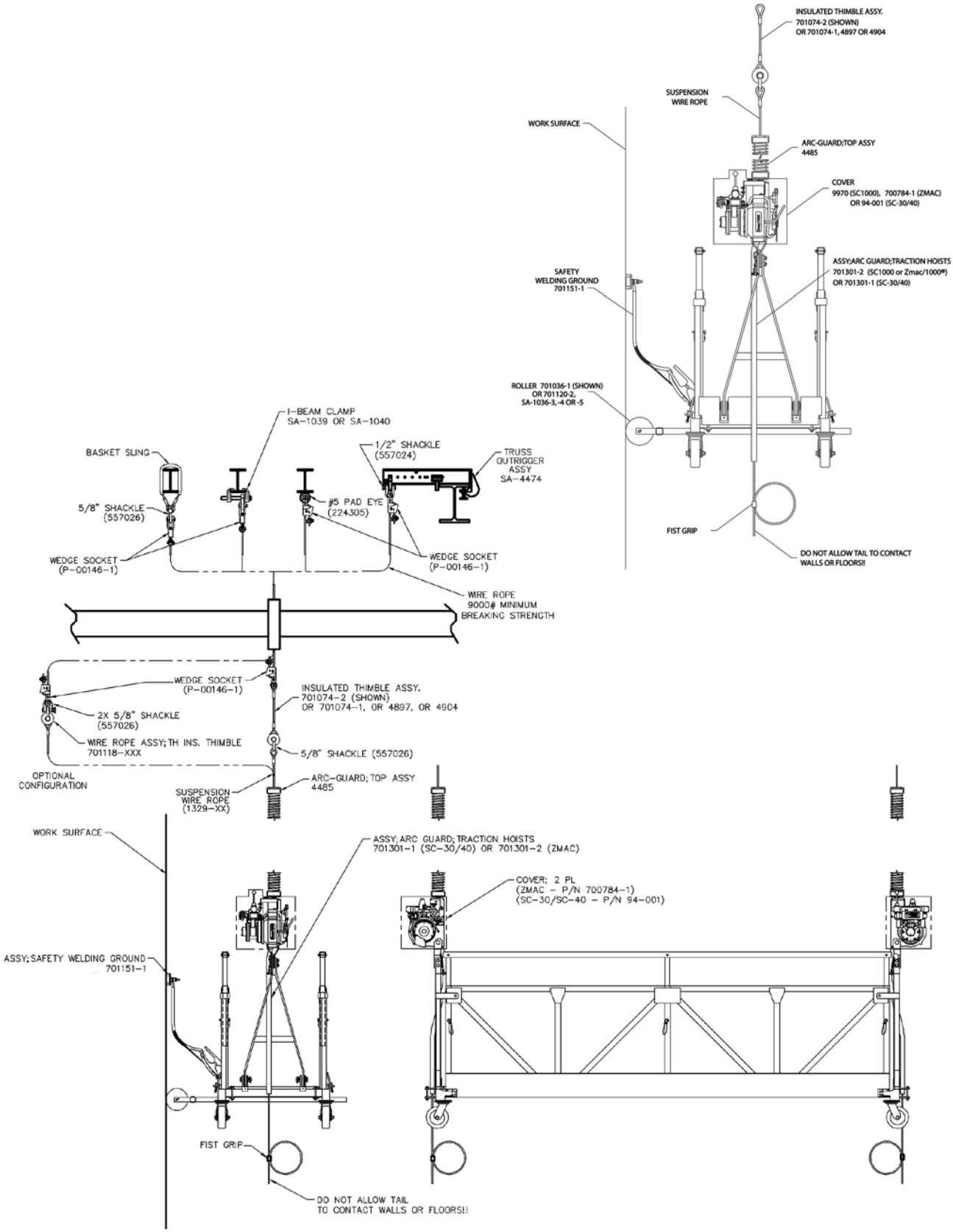


For a complete list of welding accessories, see page 135.

Welding Installation Details: Drum Hoists



Welding Installation Details: Traction Hoists



Accessories

Part Number:	Description:	Specifications:	Used With:
SA-1050	Flydeck[1]	2 ft (0.6 m) Rated working load: 250 lb (113.4 kg) each	ST-17, ST-180, 701086-1 Steel Work Cage
SA-1051	Flydeck[1]	3 ft (0.9 m) Rated working load: 250 lb (113.4 kg) each	ST-17, ST-180, 701086-1 Steel Work Cage
SA-1052	Demountable Flydeck[1]	2 ft (0.6 m) Rated working load: 250 lb (113.4 kg) each	ST-19
SA-1053	Demountable Flydeck[1]	3 ft (0.9 m) Rated working load: 250 lb (113.4 kg) each	ST-19
700934-1	Flydeck[1]	3 ft (0.9 m) Rated working load: 250 lb (113.4 kg) each Special order only	700903-1 Collapsible Aluminum Work Cage
SA-1082	Adapter Aluminum Plank	Designed for a plank 12-28 in. (305-711 mm) wide with a rail depth of 3 3/4 – 6 in. (95-152 mm)	ST-17, ST-180
SA-3135	Adapter Aluminum Plank	Designed for a plank 12-24 in. (305-610 mm) wide with a rail depth of 3 3/4 – 6 in. (95-152 mm)	ST-19
SA-1035*	Philly Wall Roller	• Attaches to any side of basket or work cage • Polyurethane caster-style wheel • Set includes two philly wall rollers with attachment hardware	ST-17, ST-180, ST-19, 701086-1 Steel Work Cage
701036-1*	Adjustable Face Roller	• Attaches to top rail, midrail or corner upright post • Designed for use against relatively fragile structures, 11 in. (279 mm) wide, soft rubber rollers distribute weight evenly to prevent structural damage • Set includes two roller brackets, four rail clamps and rollers	ST-17, ST-180, ST-19, 701086-1 Steel Work Cage
SA-1036-3*	Face Roller	• 3 Roller Assembly • Attaches to top rail, midrail or corner upright post • Designed for use against relatively fragile structures, 11 in. (279 mm) wide, soft rubber rollers distribute weight evenly to prevent structural damage • Set includes two roller brackets, four rail clamps and rollers	ST-17, ST-180, ST-19, 701086-1 Steel Work Cage
SA-1036-4*	Face Roller	• 4 Roller Assembly • Attaches to top rail, midrail or corner upright post • Designed for use against relatively fragile structures, 11 in. (279 mm) wide, soft rubber rollers distribute weight evenly to prevent structural damage • Set includes two roller brackets, four rail clamps and rollers	ST-17, ST-180, ST-19, 701086-1 Steel Work Cage

For additional Flydeck information see page 68. *Available in rental fleet only **See page 134. [1] Flydecks are sold as a set of 2

Part Number:	Description:	Specifications:	Used With:
SA-1036-5*	Face Roller	• 5 Roller Assembly • Attaches to top rail, midrail or corner upright post • Designed for use against relatively fragile structures, 11 in. (279 mm) wide, soft rubber rollers distribute weight evenly to prevent structural damage • Set includes two roller brackets, four rail clamps and rollers	ST-17, ST-180, ST-19, 701086-1 Steel Work Cage
SA-1037*	Adjustable Wall Bumper Roller	• Allows operator to adjust the distance between the rollers and the stage, as well as the distance between the rollers • Set includes: two roller brackets, four rail clamps and rollers	ST-17, ST-180, ST-19, 701086-1 Steel Work Cage
SA-1090*	Adjustable Wall Roller	• Allows operator to adjust the distance between the rollers and the stage, as well as the distance between the rollers • Set includes: two rollers and four rail clamps	ST-17, ST-180, ST-19, 701086-1 Steel Work Cage
701037-1*	Face Roller Assembly	• Foam face roller assembly (11 in. [279 mm] length x 6 in. [152 mm] diameter) for aluminum work cage • Extendable outreach from 11-18 in. (279-457 mm) from base of work cage • Set includes one roller bracket, four rail clamps and roller	700903-1 Collapsible Aluminum Work Cage
SA-1045	Rail Clamps	• Clamps face roller assemblies to standard Spider baskets	ST-17, ST-180, ST-19, 701086-1 Steel Work Cage
700907-2	Caster Assembly	• Caster assembly for aluminum work cage • 6 in. (152 mm) Hi-tech-rub, swivel caster	700903-1 Collapsible Aluminum Work Cage
SA-1072	Ground Dolly	• Allows the Spider work cage to be rolled across hard, smooth surfaces such as concrete or asphalt • To roll across a tar roof or dirt, use plywood or boards	ST-17, ST-180
SA-3065	Ground Dolly	• Allows the Spider work cage to be rolled across hard, smooth surfaces such as concrete or asphalt • To roll across a tar roof or dirt, use plywood or boards	ST-19
SA-1002	Transfer Chain	• Rugged steel rigging hooks and high quality steel chain for safe and efficient horizontal travel through structural steel • Allows for 'walking' the rigging point by transferring weight back and forth from transfer chain to rigging point to move along a beam and around vertical obstacles without lowering the stage to the ground	ST-17, ST-180, ST-19, 701086-1 Steel Work Cage, 700903-1 Collapsible Aluminum Work Cage
701151-1	Welding Ground	• Grounds the suspended platform to the structure • Helps meet OSHA 1926.451 (f) (17)	All products
1581**	Mid-Assembly Arc Guard	• Protects wire rope between fair lead and bottom arc guard	All drum and traction hoists

SA-1083**	Drum Hoist Arc Guard Kit	• Protects wire rope above and below fair lead and below deck
		• Includes Spider welding protection components:
		  • Mid Assembly (1581)
		  • Top Assembly (4485)
		  • Bottom Arc Guard: 9 in. (229 mm) removable (700947-1)
			9 in. (229 mm) Spider drums, ST-17, ST-180

SA-1083-1000**	Drum Hoist Arc Guard Kit	• Protects wire rope above and below fair lead and below deck
		• Includes Spider welding protection components:
		  • Mid Assembly (1581)
		  • Top Assembly (4485)
		  • Bottom Arc Guard: 16 in. (406 mm) removable (700953-1)
			ST-180

SA-1083-26**	Drum Hoist Arc Guard Kit	• Protects wire rope above and below fair lead and below deck
		• Includes Spider welding protection components:
		  • Mid Assembly (1581)
		  • Top Assembly (4485)
		  • Bottom Arc Guard: ST-26 removable (701305-1)
			ST-26

Flydecks

SA-1051 Flydecks can be added to ST-17 or ST-180 hoists or used to enclose Spider modular platforms such as the blade access platform pictured here.

Part Number:	Weight:	Dimensions:	Rated Working Load:	Used With:	Notes:
SA-1050 Flydeck	50 lb (22.7 kg) for the pair	23.56 in. x 24 in. x 37.25 in. (598 mm x 610 mm x 946 mm)	250 lb (113.4 kg) each	ST-17, ST-180, 701086-1 Steel Work Cage	
SA-1051 Flydeck	72 lb (32.7 kg) for the pair	23.8 in. x 36 in. x 37.25 in. (605 mm x 914 mm x 946 mm)	250 lb (113.4 kg) each	ST-17, ST-180, 701086-1 Steel Work Cage	
SA-1052 Demountable Flydeck	85 lb (38.6 kg) for the pair	23.9 in. x 24 in. x 38.9 in. (607 mm x 610 mm x 988 mm)	250 lb (113.4 kg) each	ST-19	Disassembles to pass through 18 in. (457 mm) opening
SA-1053 Demountable Flydeck	87 lb (39.5 kg) for the pair	23.9 in. x 36 in. x 38.9 in. (607 mm x 914 mm x 988 mm)	250 lb (113.4 kg) each	ST-19	Disassembles to pass through 18 in. (457 mm) opening
700934-1 Flydeck Assembly	100 lb (45.4 kg) for the pair	37.81 in. x 36 in. x 41 in. (960 mm x 914 mm x 1,041 mm)	250 lb (113.4 kg) each	700903-1 Collapsible Aluminum Work Cage	Disassembles to pass through 18 in. (457 mm) opening

Flydecks are sold as a set of 2.

Notes

Spider Modular Platforms

3 ft, 5 ft, 7 ft & 10 ft Sections

Spider Modular Platforms are designed for speed and ease of set-up, versatile uses, high load capacities and long working spans. Built to the durability standard we hold for our own rental fleet, "Spider Mod" is American-made and meets the expectations of the most demanding professional contractors.

Includes:

- 3, 5, 7 & 10 ft (1, 1.5, 2.1 & 3 m) aluminum sections
- Corner sections with hoist mount location for angled platforms
- Hinged sections for three-point suspended platforms
- Walk thru stirrups
- Low profile walk thru stirrups (or 'walk-by' stirrup)
- Single line kit for making a 3 ft (1 m), 5 ft (1.5 m) or 7 ft (2.1 m) work cage using the walk thru stirrup

Key Features:

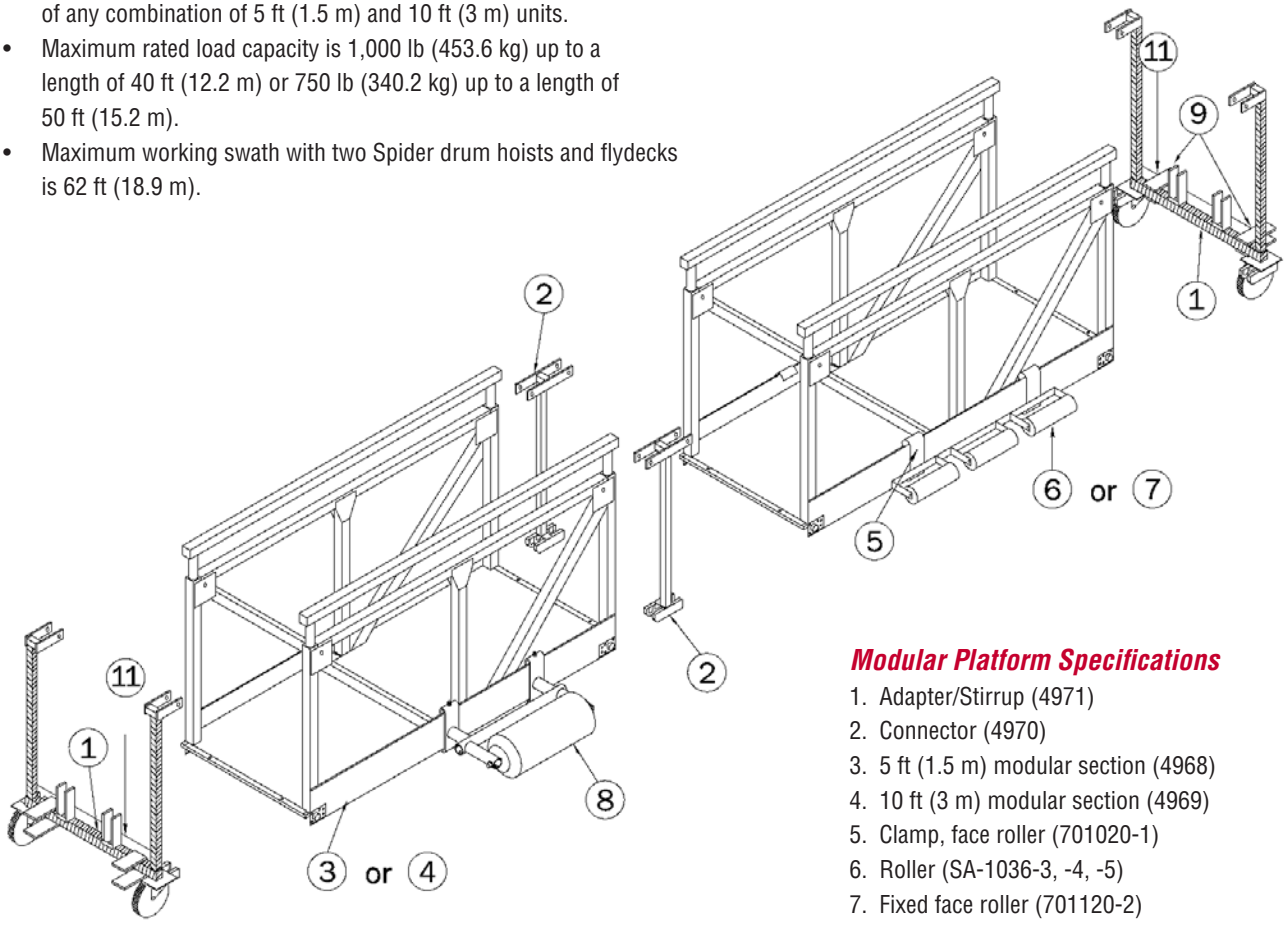
- Up to 80 ft (24.4 m) length, supported by only two hoists – longest length available on the market
- Maximum rated load:
  - 1,000 lb (453.6 kg) to 40 ft (12.2 m)
  - 750 lb (340.2 kg) to 50 ft (15.2 m)
  - 500 lb (226.8 kg) to 80 ft (24.4 m)

  (Load ratings based on minimum platform weight configurations)
- Most versatile accessory package
- Aluminum sections for lighter platform weight
- Steel construction of connectors and end adapter stirrups for longer life
- Easy transport and assembly – join sections with connectors, install end adapter stirrups that include large casters for easy mobility on the site, and get to work.
- Can be easily handled and transported in a small pick-up truck
- One universal corner section allows adjustment in 7.5° increments up to 120° – saves time and money compared to using multiple single angle sections.
- Corner section has mounting location to position a traction hoist at the corner for improved platform stability.
- Low profile walk thru stirrups position workers closer to the rigging point for larger working swath.
- Can be used with traction and drum hoists
- All pins and connecting hardware are tethered to their components.
- Made in USA

Specifications:	3 ft (1 m) Section	5 ft (1.5 m) Section	7 ft (2.1 m) Section	10 ft (3 m) Section
Part Number:	700755-1	4968	707711-1	4969
Length:	36 1/4 in. (921 mm)	60 1/4 in. (1,530 mm)	84 1/2 in. (2,140 mm)	120 1/4 in. (3,054 mm)
Width:	29 3/8 in. (746 mm)	29 3/8 in. (746 mm)	29 3/8 in. (746 mm)	29 3/8 in. (746 mm)
Height:				
• Handrails collapsed	31 3/8 in. (797 mm)	31 3/8 in. (797 mm)	31 3/8 in. (797 mm)	31 3/8 in. (797 mm)
• Handrails pinned 36 in. (914 mm) above floorboards	38 7/8 in. (987 mm)	38 7/8 in. (987 mm)	39 3/8 in. (1,000 mm)	38 7/8 in. (987 mm)
• Handrails pinned 42 in. (1,067 mm) above floorboards	44 7/8 in. (1,140 mm)	44 7/8 in. (1,140 mm)	44 7/8 in. (1,140 mm)	44 7/8 in. (1,140 mm)
Weight:				
• Standard:	55 lb (24.9 kg)	78 lb (35.4 kg)	106 lb (48.1 kg)	142 lb (64.4 kg)
• Grating Deck:	58 lb (26.3 kg) - 700755-3	80 lb (36.3 kg) - 4968-3	115 lb (52.2 kg) - 707711-3	148 lb (67.1 kg) - 4969-3
• Dimple Deck:	57 lb (25.9 kg) - 700755-2	81 lb (36.7 kg) - 4968-2	115 lb (52.2 kg) - 707711-2	148 lb (67.1 kg) - 4969-2
Construction:	Heliarc-welded aluminum	Heliarc-welded aluminum	Heliarc-welded aluminum	Heliarc-welded aluminum
Toeboard Height:	4 in. (102 mm)	4 in. (102 mm)	4 in. (102 mm)	4 in. (102 mm)

Spider Modular Platform Configurations: Using End Adapter Stirrups

- Platform lengths from 5 to 50 ft (1.5 to 15.2 m) may be comprised of any combination of 5 ft (1.5 m) and 10 ft (3 m) units.
- Maximum rated load capacity is 1,000 lb (453.6 kg) up to a length of 40 ft (12.2 m) or 750 lb (340.2 kg) up to a length of 50 ft (15.2 m).
- Maximum working swath with two Spider drum hoists and flydecks is 62 ft (18.9 m).

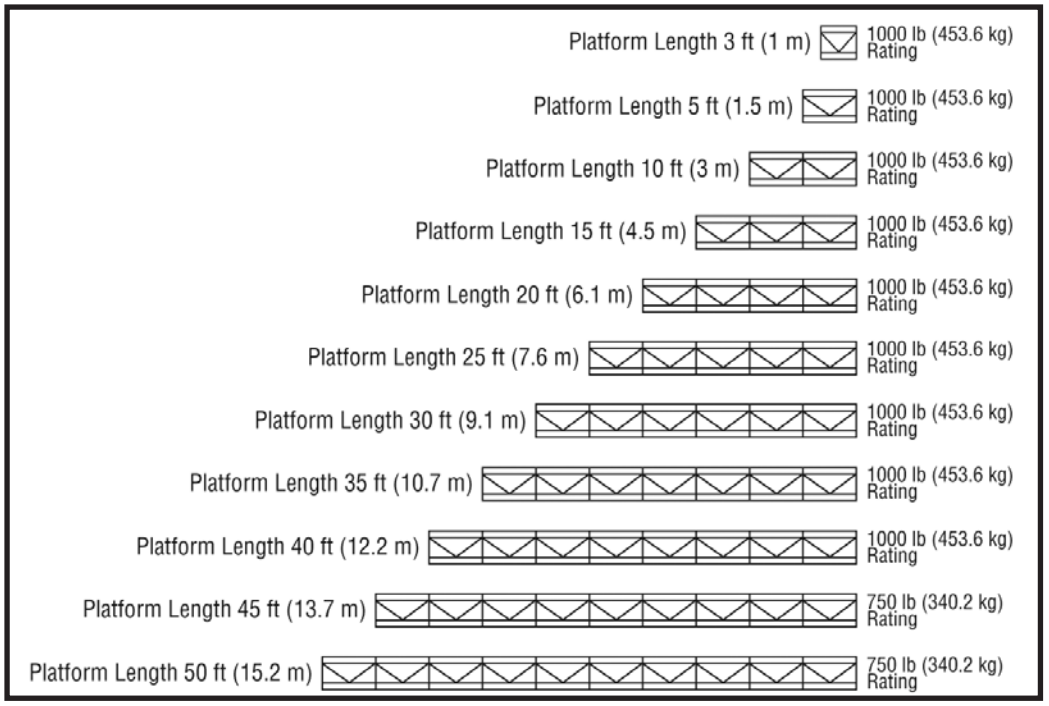


Modular Platform Specifications

1. Adapter/Stirrup (4971)
2. Connector (4970)
3. 5 ft (1.5 m) modular section (4968)
4. 10 ft (3 m) modular section (4969)
5. Clamp, face roller (701020-1)
6. Roller (SA-1036-3, -4, -5)
7. Fixed face roller (701120-2)
8. Foam roller assembly (701036-1)
9. Spider drum and traction hoists attach here
10. Single line kits (701184-1) not pictured
11. 4 in. (102 mm) toeboard

NOTE: No more than 4-3 ft (1 m) mod sections can be used on a platform.

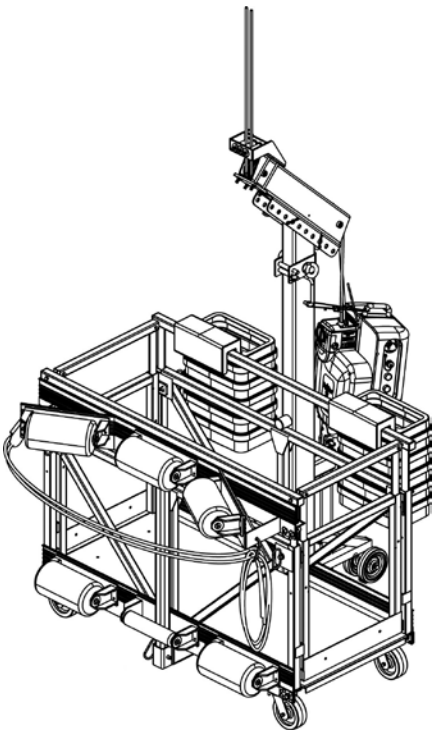
Modular Platform Configurations with End Adapter Stirrups



Platform disclaimers:

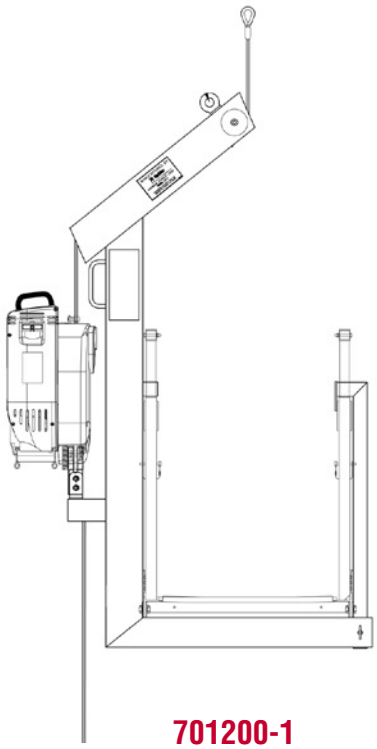
- Some configurations based on 1,500 lb. (680.4 kg) capacity hoists
- Load ratings based on minimum weight configurations
- Maximum weight configurations assembled from only 5 ft (1.5 m) sections
- Minimum weight configurations assembled using a maximum number of 10 ft (3 m) sections
- Stirrup and cross beam assemblies can be used with modular platforms on consultation with your Spider professional.
- **Configurations using longer, specially engineered platforms available. Consult your Spider professional.**

Single Line Kits available. See page 84 for details.

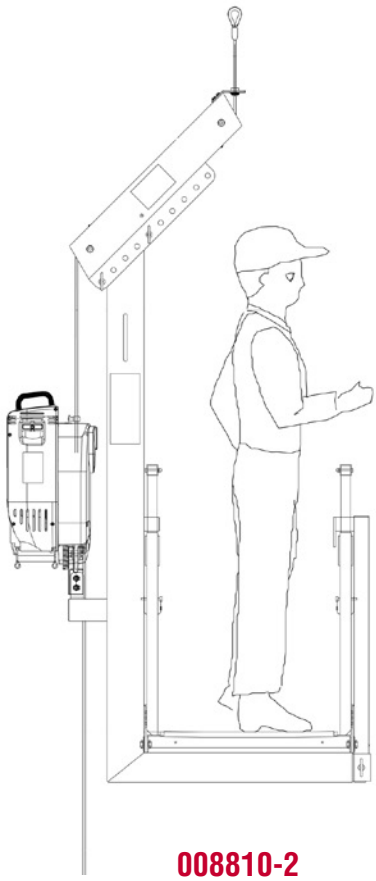


5 ft (1.5 m) section with single line kit configured as Blade Access Platform, see page 189 for details.

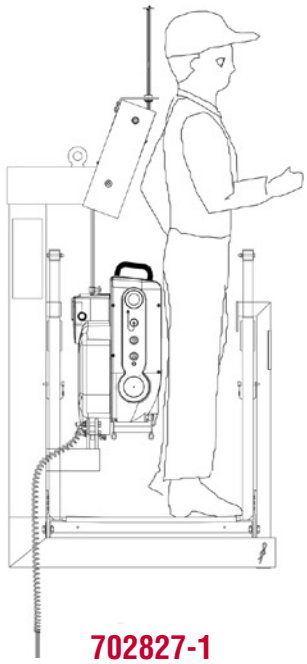
Stirrup Options for Cantilevered Platforms



701200-1
Low Overhead Stirrup Assy



008810-2
Walk Thru Stirrup Assy



702827-1
Low Profile Stirrup

Specifications:	701200-1	008810-2	702827-1
Weight:	110 lb (49.9 kg)	140 lb (63.5 kg)	108 lb (49 kg)
Dimensions:			
Width:	49 5/16 in. (1.3 m)	49 1/4 in. (1.3 m)	36 in. (0.9 m)
Height from platform deck to uppermost point on stirrup	68 1/16 in. (1.7 m)	86 1/4 in. (2.2 m)	56 15/16 in. (1.5 m)
Additional height of this stirrup compared to 702871-1:	11 1/8 in. (0.3 m)	29 3/8 in. (0.8 m)	N/A
Distance of suspension wire rope to front edge of platform:	16 13/16 in. (0.4 m)	Varies from 18 3/8 in. (0.5 m) to 26 5/16 in. (0.7 m)	17 1/8 in. (0.4 m)

How to Read Cantilever Charts

Simple steps to read the Allowable Single & Double Cantilever charts on the following pages:

Step 1: Select the total length of platform you want.

Step 2: Go to the column for the load rating you want.

Step 3: Find the minimum and maximum cantilever at that platform length and load combination.

Step 4: If length doesn't meet project needs, go to a different platform length at the same load rating or a different load rating to find a combination that will work.

PLATFORM LENGTH		500 lbs. (226.8 kg) / 2 PERSONNEL				750 lbs. (340.2 kg) / 3 PERSONNEL				1000 lbs. (453.6 kg) / 4 PERSONNEL				PLATFORM WEIGHT	
ft	m	MIN		MAX		MIN		MAX		MIN		MAX		lbs	kg
		ft	m	ft	m	ft	m	ft	m	ft	m	ft	m		
20	6.1	0	0	4	1.2	0	0	3	0.9	0	0	3	0.9	740	335.7
21	6.4	0	0	5	1.5	0	0	4	1.2	0	0	3	0.9	793	359.7
22	6.7	0	0	5	1.5	0	0	4	1.2	0	0	3	0.9	842	381.9
23	7	0	0	5	1.5	0	0	4	1.2	0	0	3	0.9	785	356.1
24	7.3	0	0	6	18	0	0	4	1.2	0	0	4	1.2	862	391
25	7.6	0	0	6	1.8	0	0	4	1.2	0	0	4	1.2	805	365.1
26	7.9	0	0	6	1.8	0	0	5	1.5	0	0	4	1.2	854	387.4
27	8.2	0	0	7	2.1	0	0	5	1.5	0	0	4	1.2	931	422.3
28	8.5	0	0	7	2.1	0	0	5	1.5	0	0	4	1.2	874	396.4
29	8.8	0	0	7	2.1	0	0	6	1.8	0	0	5	1.5	923	418.7
30	9.1	0	0	7	2.1	0	0	6	1.8	0	0	5	1.5	866	392.8
31	9.5	0	0	8	2.4	0	0	6	1.8	0	0	5	1.5	943	427.7
32	9.8	0	0	8	2.4	0	0	6	1.8	0	0	5	1.5	992	450
33	10.1	0	0	8	2.4	0	0	6	1.8	0	0	5	1.5	935	424.1
34	10.4	0	0	9	2.7	0	0	7	2.1	0	0	5	1.5	1012	459
35	10.7	0	0	9	2.7	0	0	7	2.1	0	0	5	1.5	955	433.2

#1 #2 #3

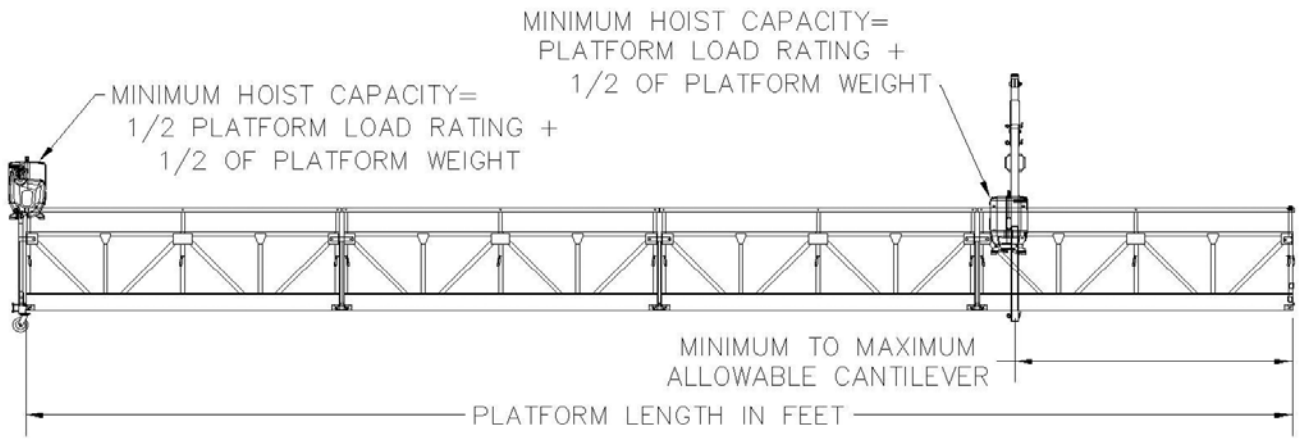
- Platform weight is based on maximum use of 10 ft (3 m) sections and SC1000 hoists and walk-thru or low profile stirrups. If your platform configuration varies from this, contact Spider Product Support to verify if your hoist rated capacity will be adequate at the different platform weight.
- Calculate the actual platform weight by adding up all parts needed.
- Rated load can be placed at any point on the platform.
- Minimum hoist capacity must be greater than the platform rated load plus one-half the platform weight. Platforms with rated loads of 750 lb (340.2 kg) or more require use of 1,500 lb. (680.4 kg) capacity hoists. These are shown in the grey shaded area on the charts.
- If hoist capacity does not exceed this calculation, contact Spider Product Support. In many cases, Spider can approve the platform load rating by limiting where the rated load can be placed. These configurations are in the pink shaded area on the charts.
- On longer platforms, the competent person should take into account the possibility of a pendulum effect (swing fall hazard). This hazard should be evaluated and mitigated as part of a properly developed Jobsite Safety Analysis (JSA).
- The Allowable Cantilever Load and Length Configuration charts on the following pages are for use with Spider walk-thru stirrups, low overhead and low profile stirrups as well as cross beam stirrup assemblies.

- Using the Cross Beam Assembly (93-001) or Stirrup Assembly (9-3) in cantilevered applications can cause abrasion on modular platform toeboards or other components. Protect the platform by attaching 60.591 rope guiding spring with part 6685 to the 2-731 or 700958-1 stirrup.

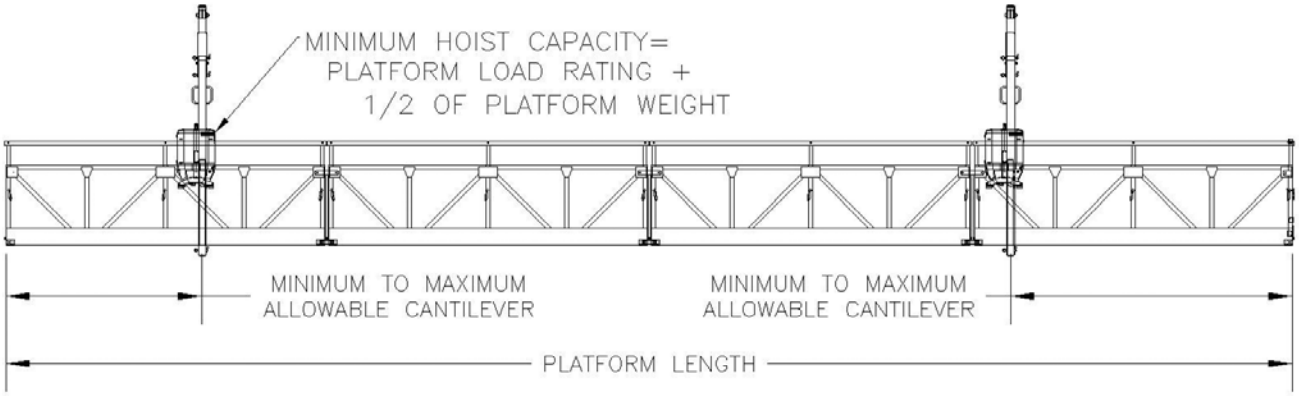
- There are additional considerations for using the Cross Beam Assembly on cantilevered platforms:
  - Extend handrails to their highest height to ensure appropriate guardrail protection at all times.
  - Never stand on the stirrup, cross beam assembly, toeboard or midrail in order to pass by the hoist.
  - Plan fall arrest equipment selection to ensure 100% tie-off when moving around the hoist.
  - It is best to avoid pulling the lifeline past the suspension wire rope to avoid entanglements.

The content contained in this catalog is for informational purposes only. For actual specifications, illustrations and information, consult the Operators Manual, product labels, or a Spider professional.

Single Cantilever Configuration



Double Cantilever Configuration



Allowable Single Cantilever Load and Length Configurations

For use with all Spider stirrups and cross beam assembly.

PLATFORM LENGTH		500 lb (226.8) kg / 2 PERSONNEL				750 lb (340.2) kg / 3 PERSONNEL				1000 lb (453.6) kg / 4 PERSONNEL				PLATFORM WEIGHT	
ft	m	MIN		MAX		MIN		MAX		MIN		MAX		lb	kg
		ft	m	ft	m	ft	m	ft	m	ft	m	ft	m		
20	6.1	0	0	4	1.2	0	0	3	0.9	0	0	3	0.9	740	335.7
21	6.4	0	0	5	1.5	0	0	4	1.2	0	0	3	0.9	793	359.7
22	6.7	0	0	5	1.5	0	0	4	1.2	0	0	3	0.9	842	381.9
23	7	0	0	5	1.5	0	0	4	1.2	0	0	3	0.9	785	356.1
24	7.3	0	0	6	1.8	0	0	4	1.2	0	0	4	1.2	862	391
25	7.6	0	0	6	1.8	0	0	4	1.2	0	0	4	1.2	805	365.1
26	7.9	0	0	6	1.8	0	0	5	1.5	0	0	4	1.2	854	387.4
27	8.2	0	0	7	2.1	0	0	5	1.5	0	0	4	1.2	931	422.3
28	8.5	0	0	7	2.1	0	0	5	1.5	0	0	4	1.2	874	396.4
29	8.8	0	0	7	2.1	0	0	6	1.8	0	0	5	1.5	923	418.7
30	9.1	0	0	7	2.1	0	0	6	1.8	0	0	5	1.5	866	392.8
31	9.5	0	0	8	2.4	0	0	6	1.8	0	0	5	1.5	943	427.7
32	9.8	0	0	8	2.4	0	0	6	1.8	0	0	5	1.5	992	450
33	10.1	0	0	8	2.4	0	0	6	1.8	0	0	5	1.5	935	424.1
34	10.4	0	0	9	2.7	0	0	7	2.1	0	0	5	1.5	1012	459
35	10.7	0	0	9	2.7	0	0	7	2.1	0	0	5	1.5	955	433.2
36	11	0	0	9	2.7	0	0	7	2.1	0	0	5	1.5	1004	455.4
37	11.3	0	0	10	3.1	0	0	8	2.4	0	0	5	1.5	1081	490.3
38	11.6	0	0	10	3.1	0	0	8	2.4	0	0	5	1.5	1024	464.5
39	11.9	0	0	10	3.1	0	0	8	2.4	0	0	5	1.5	1073	486.7
40	12.2	0	0	10	3.1	0	0	8	2.4	0	0	5	1.5	1016	460.9
41	12.5	0	0	11	3.4	0	0	9	2.7	1	0.3	5	1.5	1061	481.3
42	12.8	0	0	11	3.4	0	0	9	2.7	2	0.6	5	1.5	1142	518
43	13.1	0	0	11	3.4	0	0	9	2.7	3	0.9	5	1.5	1085	492.2
44	13.4	0	0	12	3.7	0	0	10	3.1	4	1.2	5	1.5	1162	527.1
45	13.7	0	0	12	3.7	0	0	9	2.7	5	1.5	5	1.5	1105	501.2
46	14	0	0	12	3.7	0	0	10	3.1	NOT ALLOWED				1154	523.5
47	14.3	0	0	13	4	0	0	10	3.1	NOT ALLOWED				1231	558.4
48	14.6	0	0	13	4	0	0	10	3.1	NOT ALLOWED				1174	532.5
49	14.9	0	0	13	4	0	0	11	3.4	NOT ALLOWED				1223	554.7
50	15.2	0	0	13	4	0	0	11	3.4	NOT ALLOWED				1166	528.9
51	15.5	0	0	14	4.3	1	0.3	11	3.4	NOT ALLOWED				1243	563.8
52	15.9	0	0	15	4.6	2	0.6	12	3.7	NOT ALLOWED				1292	586
53	16.2	0	0	15	4.6	3	0.9	12	3.7	NOT ALLOWED				1235	560.2
54	16.5	0	0	15	4.6	4	1.2	12	3.7	NOT ALLOWED				1312	595.1
55	16.8	0	0	15	4.6	5	1.5	12	3.7	NOT ALLOWED				1255	569.3
56	17.1	0	0	15	4.6	6	1.8	13	4	NOT ALLOWED				1304	591.5
57	17.4	0	0	15	4.6	7	2.1	14	4.3	NOT ALLOWED				1381	626.4
58	17.7	0	0	15	4.6	8	2.4	13	4	NOT ALLOWED				1324	600.6
59	18	0	0	15	4.6	9	2.7	14	4.3	NOT ALLOWED				1373	622.8
60	18.3	1	0.3	15	4.6	10	3.1	14	4.3	NOT ALLOWED				1316	596.9
61	18.6	1	0.3	15	4.6	11	3.4	15	4.6	NOT ALLOWED				1393	631.9
62	18.9	2	0.6	15	4.6	12	3.7	15	4.6	NOT ALLOWED				1442	654.1
63	19.2	3	0.9	15	4.6	13	4	15	4.6	NOT ALLOWED				1385	628.2
64	19.5	4	1.2	15	4.6	14	4.3	15	4.6	NOT ALLOWED				1462	663.2
65	19.8	5	1.5	15	4.6	15	4.6	15	4.6	NOT ALLOWED				1405	637.3
66	20.1	6	1.8	15	4.6	NOT ALLOWED				NOT ALLOWED				1454	659.5
67	20.4	7	2.1	15	4.6	NOT ALLOWED				NOT ALLOWED				1531	694.5
68	20.7	8	2.4	15	4.6	NOT ALLOWED				NOT ALLOWED				1474	668.6
69	21	9	2.7	15	4.6	NOT ALLOWED				NOT ALLOWED				1523	690.8
70	21.3	10	3.1	15	4.6	NOT ALLOWED				NOT ALLOWED				1466	665
71	21.6	11	3.4	15	4.6	NOT ALLOWED				NOT ALLOWED				1543	699.9
72	21.9	12	3.7	15	4.6	NOT ALLOWED				NOT ALLOWED				1592	722.1
73	22.3	13	4	15	4.6	NOT ALLOWED				NOT ALLOWED				1535	696.3
74	22.6	14	4.3	15	4.6	NOT ALLOWED				NOT ALLOWED				1612	731.2
75	22.9	15	4.6	15	4.6	NOT ALLOWED				NOT ALLOWED				1555	705.3
76	23.2	NOT ALLOWED				NOT ALLOWED				NOT ALLOWED				1604	727.6
77	23.5	NOT ALLOWED				NOT ALLOWED				NOT ALLOWED				1681	762.5
78	23.8	NOT ALLOWED				NOT ALLOWED				NOT ALLOWED				1624	736.6
79	24.1	NOT ALLOWED				NOT ALLOWED				NOT ALLOWED				1673	758.9
80	24.4	NOT ALLOWED				NOT ALLOWED				NOT ALLOWED				1616	733

• Rated loads do not apply to platforms with double cantilevers

Requires 1,500 lb. (680.4 kg) hoist

Contact Spider Product Support for Load Distribution Guidance

Allowable Double Cantilever Load and Length Configurations

For use with all Spider stirrups and cross beam assembly.

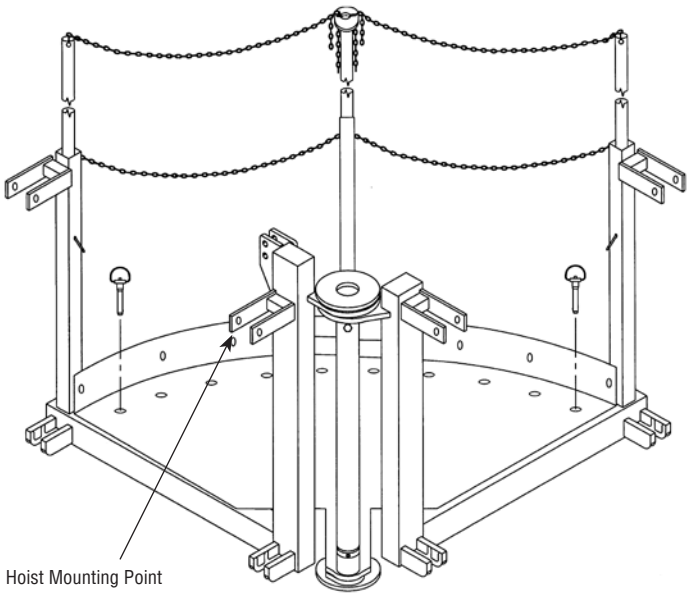
PLATFORM LENGTH		500 lb (226.8) kg / 2 PERSONNEL				750 lb (340.2) kg / 3 PERSONNEL				1000 lb (453.6) kg / 4 PERSONNEL				PLATFORM WEIGHT	
ft	m	MIN		MAX		MIN		MAX		MIN		MAX		lb	kg
		ft	m	ft	m	ft	m	ft	m	ft	m	ft	m		
20	6.1	0	0	4	1.2	0	0	4	1.2	0	0	3	0.9	788	357.4
21	6.4	0	0	5	1.5	0	0	4	1.2	0	0	3	0.9	865	392.4
22	6.7	0	0	5	1.5	0	0	4	1.2	0	0	4	1.2	914	414.6
23	7	0	0	5	1.5	0	0	4	1.2	0	0	4	1.2	857	388.7
24	7.3	0	0	6	1.8	0	0	4	1.2	0	0	4	1.2	934	423.7
25	7.6	0	0	6	1.8	0	0	5	1.5	0	0	4	1.2	877	397.8
26	7.9	0	0	6	1.8	0	0	5	1.5	0	0	4	1.2	926	420
27	8.2	0	0	7	2.1	0	0	5	1.5	0	0	5	1.5	1003	455
28	8.5	0	0	7	2.1	0	0	5	1.5	0	0	5	1.5	946	429.1
29	8.8	0	0	7	2.1	0	0	6	1.8	0	0	5	1.5	995	451.3
30	9.1	0	0	7	2.1	0	0	6	1.8	0	0	5	1.5	938	425.5
31	9.5	0	0	8	2.4	0	0	6	1.8	0	0	5	1.5	1015	460.4
32	9.8	0	0	8	2.4	0	0	6	1.8	0	0	5	1.5	1064	482.6
33	10.1	0	0	8	2.4	0	0	6	1.8	0	0	5	1.5	1007	456.8
34	10.4	0	0	9	2.7	0	0	7	2.1	0	0	5	1.5	1084	491.7
35	10.7	0	0	9	2.7	0	0	7	2.1	0	0	5	1.5	1027	465.8
36	11	0	0	9	2.7	0	0	7	2.1	0	0	5	1.5	1076	488.4
37	11.3	0	0	10	3.1	0	0	8	2.4	0	0	5	1.5	1153	523
38	11.6	0	0	10	3.1	0	0	8	2.4	0	0	5	1.5	1096	497.1
39	11.9	0	0	10	3.1	0	0	8	2.4	0	0	5	1.5	1145	519.4
40	12.2	0	0	10	3.1	0	0	8	2.4	0	0	5	1.5	1088	493.5
41	12.5	0	0	11	3.4	0	0	9	2.7	1	0.3	5	1.5	1165	528.4
42	12.8	0	0	11	3.4	0	0	9	2.7	1	0.3	5	1.5	1214	550.7
43	13.1	0	0	11	3.4	0	0	9	2.7	2	0.6	5	1.5	1157	524.8
44	13.4	0	0	12	3.7	0	0	10	3.1	2	0.6	5	1.5	1234	559.7
45	13.7	0	0	12	3.7	0	0	10	3.1	3	0.9	5	1.5	1177	533.9
46	14	0	0	12	3.7	0	0	10	3.1	3	0.9	5	1.5	1226	556.1
47	14.3	0	0	13	4	0	0	11	3.4	4	1.2	5	1.5	1303	591
48	14.6	0	0	13	4	0	0	11	3.4	4	1.2	5	1.5	1246	565.2
49	14.9	0	0	13	4	0	0	11	3.4	5	1.5	5	1.5	1295	587.4
50	15.2	0	0	13	4	0	0	11	3.4	5	1.5	5	1.5	1238	561.6
51	15.5	0	0	14	4.3	1	0.3	11	3.4	NOT ALLOWED				1315	596.5
52	15.9	0	0	15	4.6	1	0.3	12	3.7	NOT ALLOWED				1364	618.7
53	16.2	0	0	15	4.6	2	0.6	12	3.7	NOT ALLOWED				1307	592.9
54	16.5	0	0	15	4.6	2	0.6	12	3.7	NOT ALLOWED				1384	627.8
55	16.8	0	0	15	4.6	3	0.9	12	3.7	NOT ALLOWED				1327	601.9
56	17.1	0	0	15	4.6	3	0.9	13	4	NOT ALLOWED				1376	624.1
57	17.4	0	0	15	4.6	4	1.2	14	4.3	NOT ALLOWED				1453	659.1
58	17.7	0	0	15	4.6	4	1.2	14	4.3	NOT ALLOWED				1396	633.2
59	18	0	0	15	4.6	5	1.5	14	4.3	NOT ALLOWED				1445	655.4
60	18.3	0	0	15	4.6	5	1.5	14	4.3	NOT ALLOWED				1388	629.6
61	18.6	1	0.3	15	4.6	6	1.8	15	4.6	NOT ALLOWED				1465	664.5
62	18.9	1	0.3	15	4.6	6	1.8	15	4.6	NOT ALLOWED				1514	686.7
63	19.2	2	0.6	15	4.6	7	2.1	15	4.6	NOT ALLOWED				1457	660.9
64	19.5	2	0.6	15	4.6	7	2.1	15	4.6	NOT ALLOWED				1534	695.8
65	19.8	3	0.9	15	4.6	8	2.4	15	4.6	NOT ALLOWED				1477	670
66	20.1	3	0.9	15	4.6	8	2.4	15	4.6	NOT ALLOWED				1526	692.2
67	20.4	4	1.2	15	4.6	9	2.7	15	4.6	NOT ALLOWED				1603	727.1
68	20.7	4	1.2	15	4.6	9	2.7	15	4.6	NOT ALLOWED				1546	701.3
69	21	5	1.5	15	4.6	10	3.1	15	4.6	NOT ALLOWED				1595	723.5
70	21.3	5	1.5	15	4.6	10	3.1	15	4.6	NOT ALLOWED				1538	967.6
71	21.6	6	1.8	15	4.6	11	3.4	15	4.6	NOT ALLOWED				1615	732.6
72	21.9	6	1.8	15	4.6	11	3.4	15	4.6	NOT ALLOWED				1664	754.8
73	22.3	7	2.1	15	4.6	12	3.7	15	4.6	NOT ALLOWED				1607	728.9
74	22.6	7	2.1	15	4.6	12	3.7	15	4.6	NOT ALLOWED				1684	763.9
75	22.9	8	2.4	15	4.6	13	4	15	4.6	NOT ALLOWED				1627	738
76	23.2	8	2.4	15	4.6	13	4	15	4.6	NOT ALLOWED				1676	760.2
77	23.5	9	2.7	15	4.6	14	4.3	15	4.6	NOT ALLOWED				1753	795.2
78	23.8	9	2.7	15	4.6	14	4.3	15	4.6	NOT ALLOWED				1696	769.3
79	24.1	10	3.1	15	4.6	15	4.6	15	4.6	NOT ALLOWED				1745	791.5
80	24.4	10	3.1	15	4.6	15	4.6	15	4.6	NOT ALLOWED				1688	765.7

• Rated loads do not apply to platforms with single cantilevers

Requires 1,500 lb. (680.4 kg) hoist

Contact Spider Product Support for Load Distribution Guidance

Corner Configurations



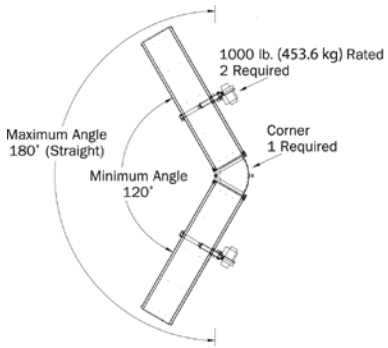
Corner Adapter (008812-1)

The corner adapter joins modular platforms so workers can go around the corner of the building or architectural detail or around circular structures. Angles from 7.5-120° are possible. A traction hoist mount is located on the corner for increased stability without the extra weight and expense of a walk thru stirrup. Countless platform configurations are available with this versatile accessory. For more information on additional configurations, contact your Spider professional.

Key Features:

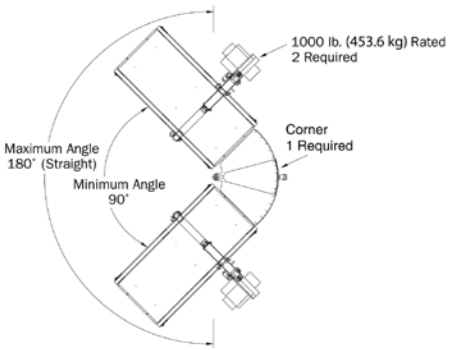
- Allows adjustability in 7.5° increments from 7.5 to 120°
- Positions hoist right at corner with the **only structurally integrated corner section with hoist mount on the market**
- Improved platform stability
- Extensive applications library available

Specifications:	**008812-1**
Weight:	128 lb (58.1 kg)
Dimensions:	32 x 32 x 46 in. (813 x 813 x 1,168 mm)
Construction:	Steel



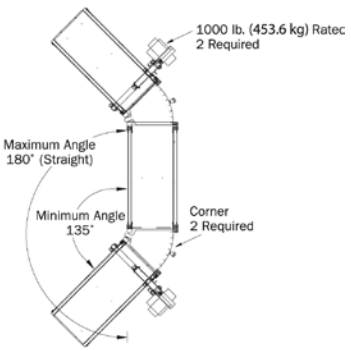
Maximum rated live load 500 lb (226.8 kg)

10 ft (3 m) platform sections used for configuration.



Maximum rated live load 500 lb (226.8 kg)

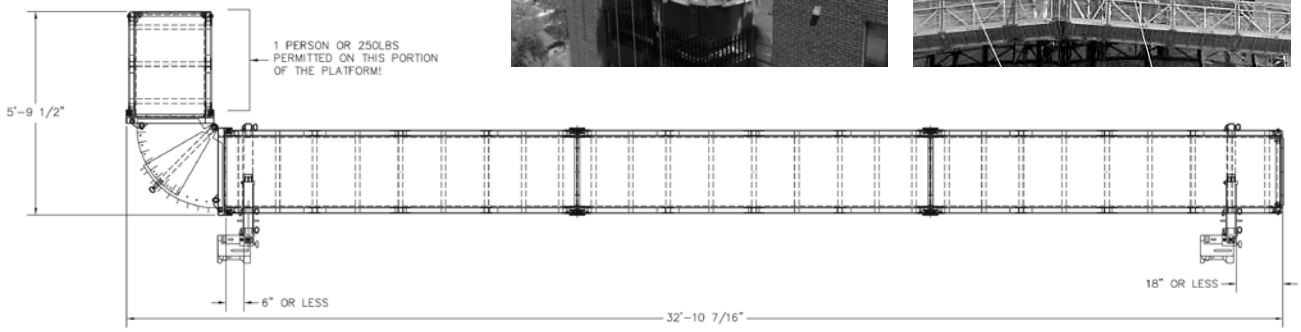
5 ft (1.5 m) platform sections used for configuration.



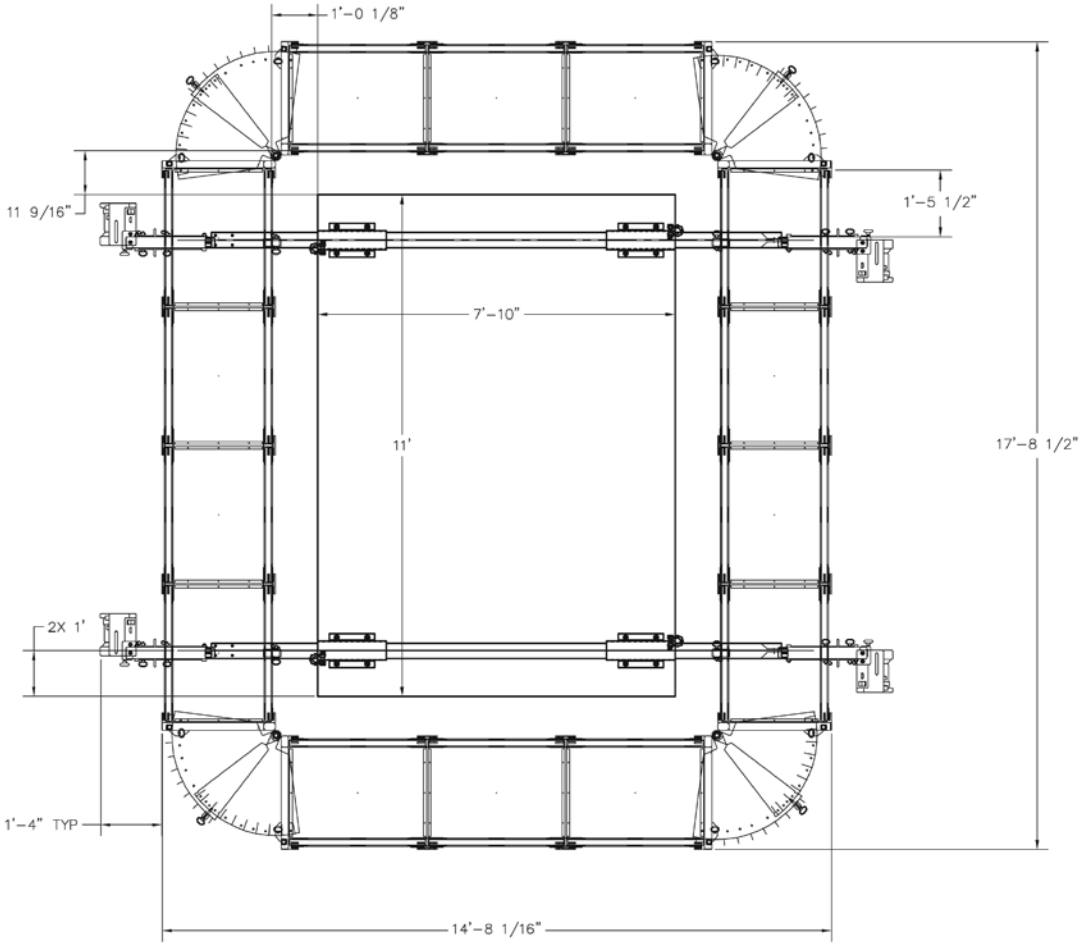
Maximum rated live load 500 lb (226.8 kg)

5 ft (1.5 m) platform sections used for configuration.

Recommended mounting for SC1000/1500 uses two 8-0406 20° adapters.

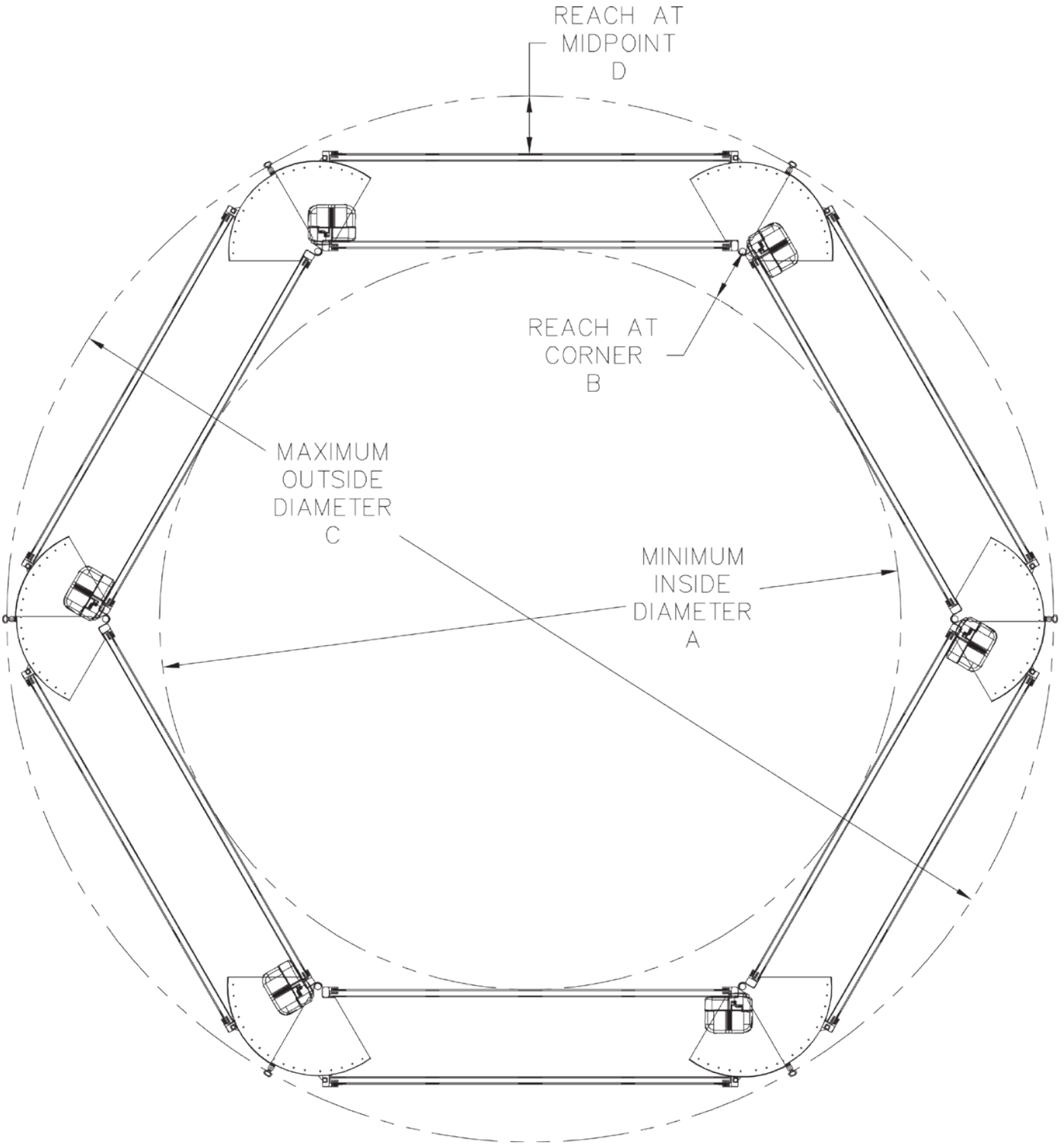


Two suspension point angled platform



Four suspension point angled platform

Circular Modular Platforms



Don't see the configuration you need? Call your Spider professional.

See page 81 for dimensions.

Circular Modular Platform Typical Configurations

Drawing Number	Length of Sides (Ft)	No. of Sides	Hoists (1,000 lb)	Platform Weight (lb)	Live Load (lb/Pers)*	Min. Inside Diameter A		Reach at Corner B	Max. Outside Diameter C		Reach at Midpoint D
RND3-4	3	4	3	1,272	1,200/4	3 ft	9 in.	7 in.	10 ft	2 in.	10 in.
RND3-5	3	5	3	1,445	1,200/4	5 ft	1 in.	5 in.	11 ft	3 in.	9 in.
RND5-4	5	4	4	1,172	1,200/4	5 ft	9 in.	12 in.	13 ft	0 in.	15 in.
RND3-6	3	6	3	1,338	1,200/4	6 ft	5 in	4 in.	12 ft	4 in.	7 in.
RND5-5	5	5	3	1,545	1,200/4	7 ft	10 in.	9 in.	14 ft	8 in.	12 in.
RND8-4	8	4	4	1,448	1,200/4	8 ft	9 in.	19 in.	17 ft	4 in.	23 in.
RND3-8	3	8	4	1,784	1,200/4	8 ft	10 in.	2 in.	14 ft	6 in.	5.5 in.
RND5-6	5	6	3	1,458	1,200/4	9 ft	10 in.	7 in.	16 ft	4 in.	10 in.
RND10-4	10	4	4	1,416	1,200/4	10 ft	9 in.	24 in.	20 ft	2 in.	28 in.
RND8-5	8	5	5	1,810	1,500/5	12 ft	0 in.	15 in.	19 ft	10 in.	18 in.
RND5-8	5	8	4	1,944	1,200/4	13 ft	8 in.	4 in.	19 ft	9 in.	8 in.
RND13-4	13	4	4	1,692	1,200/4	13 ft	10 in.	32 in.	24 ft	5 in.	36 in.
RND10-5	10	5	5	1,770	1,500/5	14 ft	10 in.	18 in.	23 ft	2 in.	22 in.
RND8-6	8	6	6	2,172	1,800/6	15 ft	1 in.	12 in.	22 ft	5 in.	15 in.
RND15-4	15	4	4	1,772	1,200/4	15 ft	10 in.	37 in.	27 ft	3 in.	40 in.
RND10-6	10	6	6	2,124	1,800/6	18 ft	7 in.	15 in.	26 ft	4 in.	19 in.
RND13-5	13	5	5	2,115	1,500/5	18 ft	11 in.	24 in.	28 ft	4 in.	28 in.
RND8-8	8	8	8	2,896	2,400/8	21 ft	0 in.	8 in.	27 ft	3 in.	12 in.
RND15-5	15	5	5	2,215	1,500/5	21 ft	8 in.	28 in.	31 ft	9 in.	32 in.
RND13-6	13	6	6	2,538	1,800/6	23 ft	10 in.	20 in.	32 ft	5 in.	24 in.
RND10-8	10	8	8	2,832	2,400/8	25 ft	10 in.	10 in.	32 ft	10 in.	14 in.
RND15-6	15	6	6	2,658	1,800/6	27 ft	3 in.	23 in.	36 ft	5 in.	27 in.
RND13-8	13	8	8	3,384	2,400/8	33 ft	2 in.	14 in.	40 ft	10 in.	18 in.
RND15-8	15	8	8	3,544	2,400/8	37 ft	12 in.	16 in.	46 ft	1 in.	20 in.

*Load must be distributed. Higher live loads may be possible with more requirements for distributing loads. Contact your Spider professional.

Stirrup Assembly (9-3)

This stirrup assembly attaches at deck level of fixed length, ladder style pick boards or planks.

Platform width is approximately 28 in. (711 mm) wide.

Built by Spider in the USA

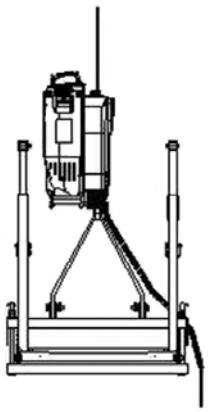
Specifications:	9-3
Rated capacity:	1,000 lb (453.6 kg)
Weight:	51 lb (23.1 kg)
Construction:	Steel

For higher hoist position replace the 2-731 A-Frame stirrup with 700958-1 to make a total stirrup height of 54 in. (1,372 mm)

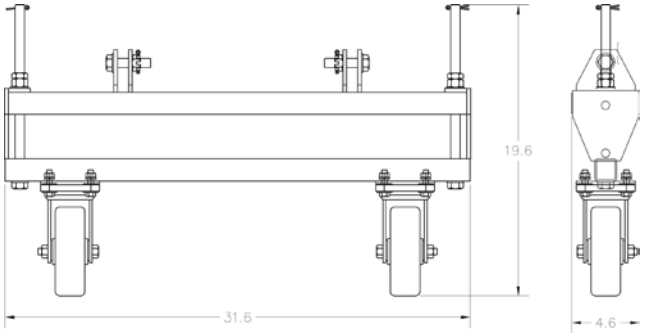
2-731 and 700958-1 available separately

Protect your toeboards!

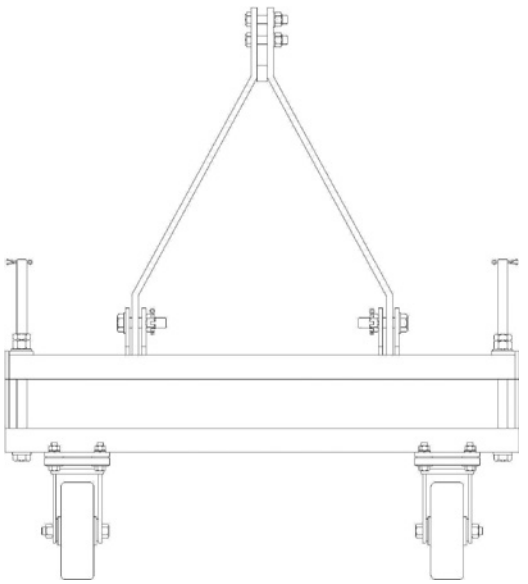
A 60.591 Rope Guiding Spring and a 6685 Outlet Spring Bracket easily attach to the bottom of the hoist with just a 3/4 in. (19 mm) wrench to spare your toeboards from damage often caused by wire rope while using the Cross Beam Assembly.



Spider rents planks in some locations.
Widths, lengths and load capacities vary.
Contact your Spider professional for more details.



93-001 is used with SC30 and SC40 long frame stirrups (BB-002)

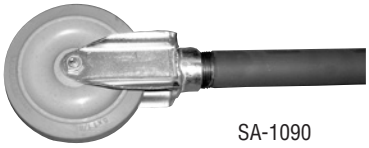


9-3 connects SC1000 hoists to plank-style platforms.
93-001 and 700958-1 connect Zmac/1000® to planks.

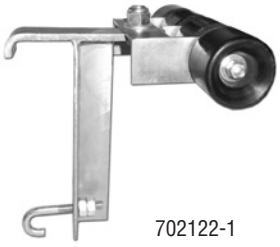
Wall Rollers

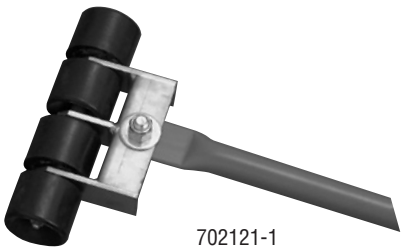
Part Number	Description	Outreach	Weight
701037-1	Face Roller/Clamp Assembly for Work Cages	11-18 in. (279-457 mm) from base of the work cage	15 lb (6.8 kg)
SA-1090*	Adjustable Wall Roller with Non-conductive Rubber Wheel for ST-27	48 in. (1,219 mm)	10 lb (4.5 kg)
701864-1	Side Roller Clamp, allows SA-1090 to be installed at end of platform rather than side.	8-18 in. (203-457 mm)	5 lb (2.3 kg) each Use 4 with SA-1090
SA-1035	Philly Wall Roller for Drum Hoists	5 1/2 in. (140 mm)	10 lb (4.5 kg)
SA-1036-3*	Face Roller for Drum Hoists	5 – 18 in. (127 – 457 mm)	17 lb (7.7 kg)
SA-1036-4*	Face Roller for Drum Hoists	5 – 18 in. (127 – 457 mm)	21 lb (9.5 kg)
SA-1036-5*	Face Roller for Drum Hoists	5 – 18 in. (127 – 457 mm)	25 lb (11.3 kg)
SA-1037*	Adjustable Wall Bumper Roller for Drum Hoists	5 – 18 in. (127 – 457 mm)	varies
701120-2	Clamp Face Roller for Mod Platform	6 in. (152 mm)	5 lb (2.3 kg)
701036-1	Foam Roller Assembly for Mod Platform	9 – 20 in. (229 – 508 mm)	12 lb (5.4 kg)
702122-1	Roller Bumpers to attach at deck level of planks	6 in. (152 mm)	6 lb (2.7 kg)
702121-1	Adjustable Roller Bumpers to attach at deck level of planks	12 in. (305 mm) when fully extended	8 lb (3.6 kg)
60.047	Wall Roller for Modulo 18	7 in. (178 mm)	4 lb (1.8 kg)
706067-1	Fixed Face Roller	N/A	3.9 lb (1.8 kg)

* Includes four SA-1045 rail clamps (not shown)

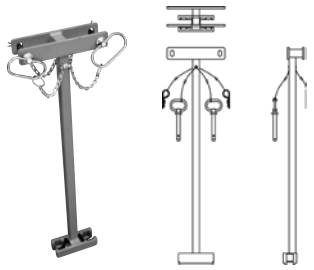
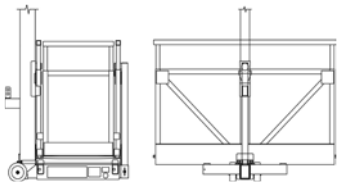
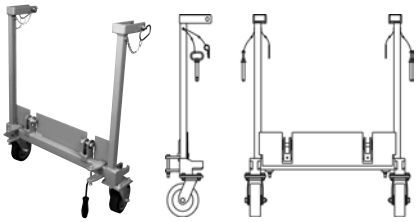
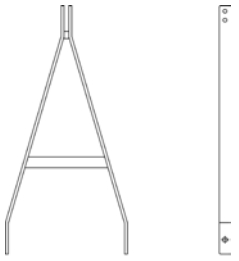
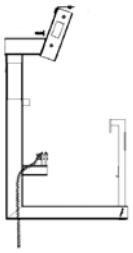
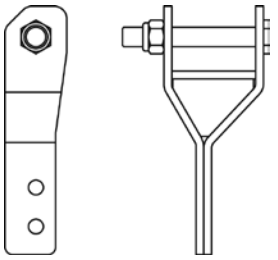
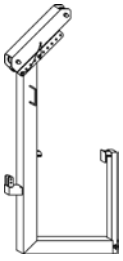
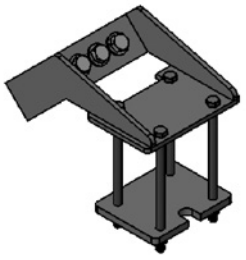
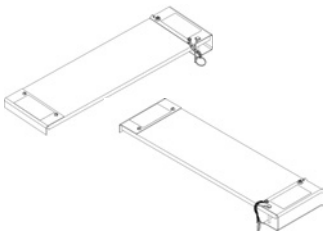
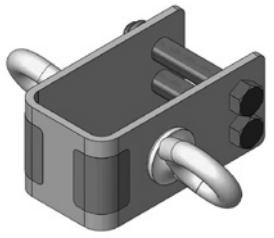
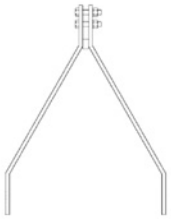

SA-1090

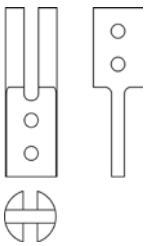
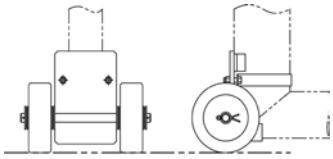
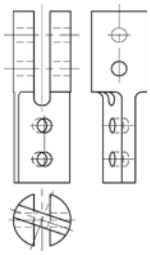
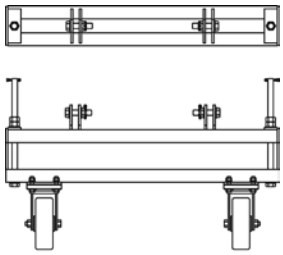
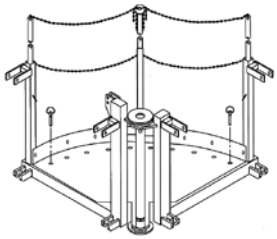
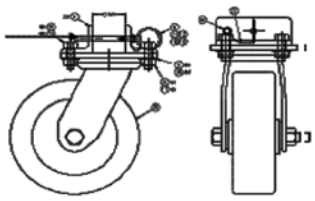

SA-1036-3


702122-1


702121-1

Modular Platform Accessories

Connector (4970) Weight: 7 lb (3 kg)		**Single Line Kit (701184-1)** Weight: 54 lb (24.5 kg) Consists of a top and bottom support and a wheel assembly. This kit makes a 3, 5 or 7 ft (1, 1.5 or 2.1 m) section into a 750 lb. (340.2 kg) maximum load single line work cage, using endgates to finish the cage.	
End Adapter/Stirrup with Casters (4971) Weight: 37 lb (17 kg)		**Zmac/1000® Stirrup (700958-1)** Weight: 16 lb (7.3 kg)	
Low Profile Stirrup (702827-1) Weight: 108 lb (49 kg) Dimensions: 57 in. (1.5 m) from floor board to top of stirrup		**Zmac/1000® Adapter (700956-1)** Weight: 3 lb (1.4 kg)	
Walk Thru Stirrup (008810-2) Weight: 140 lb (63.5 kg)		**Inlet Roller Assembly (705575-1)** Weight: 3 lb (1.4 kg)	
Drill Bench (707034-1) Weight: 4 lb (1.8 kg)		**Anchor Safety Assembly (705465-1)** Weight: 7 lb (3.2 kg)	
A-Frame Stirrup Assembly (2-731) Weight: 8 lb (3.6 kg) Used with End Adapter (4971) or Cross Beam Assembly (93-001)		**Kick Stand Assembly (705413-1)** Weight: 12 lb (5.4 kg)	

90° Adapter (8-0278) Weight: 3 lb (1.4 kg) Used with Walk Thru Stirrup (008810-2) and Corner Adapter (008812-1) Fasteners included		**Walk Thru Stirrup Wheel Assembly (700777-1)** Weight: 12 lb (5.4 kg)	
20º Adapter (8-0406) Weight: 3 lb (1.4 kg) Used with Walk Thru Stirrup (008810-2) Fasteners included		**Cross Beam Assembly (93-001)** Weight: 45 lb (20.4 kg) Combine with 2-731 for SC1000/Zmac/1000® models or with BB-002 for SC30/ SC40 models to make a stirrup for planks or some modular platforms.	
Corner Adapter (008812-1) Weight: 128 lb (58.1 kg)		**Endgate Assembly (008811-2)** Weight: 12 lb (5.4 kg)	
Caster (4986-01) Weight: 5.4 lb (2.6 kg)		**9-3 Stirrup Assembly** Weight: 59 lb (26.8 kg) Combines 93-001 and 2-731 for SC1000 models.	

Call or click for more information
1-877-774-3370
www.spiderstaging.com

Modulo® 18

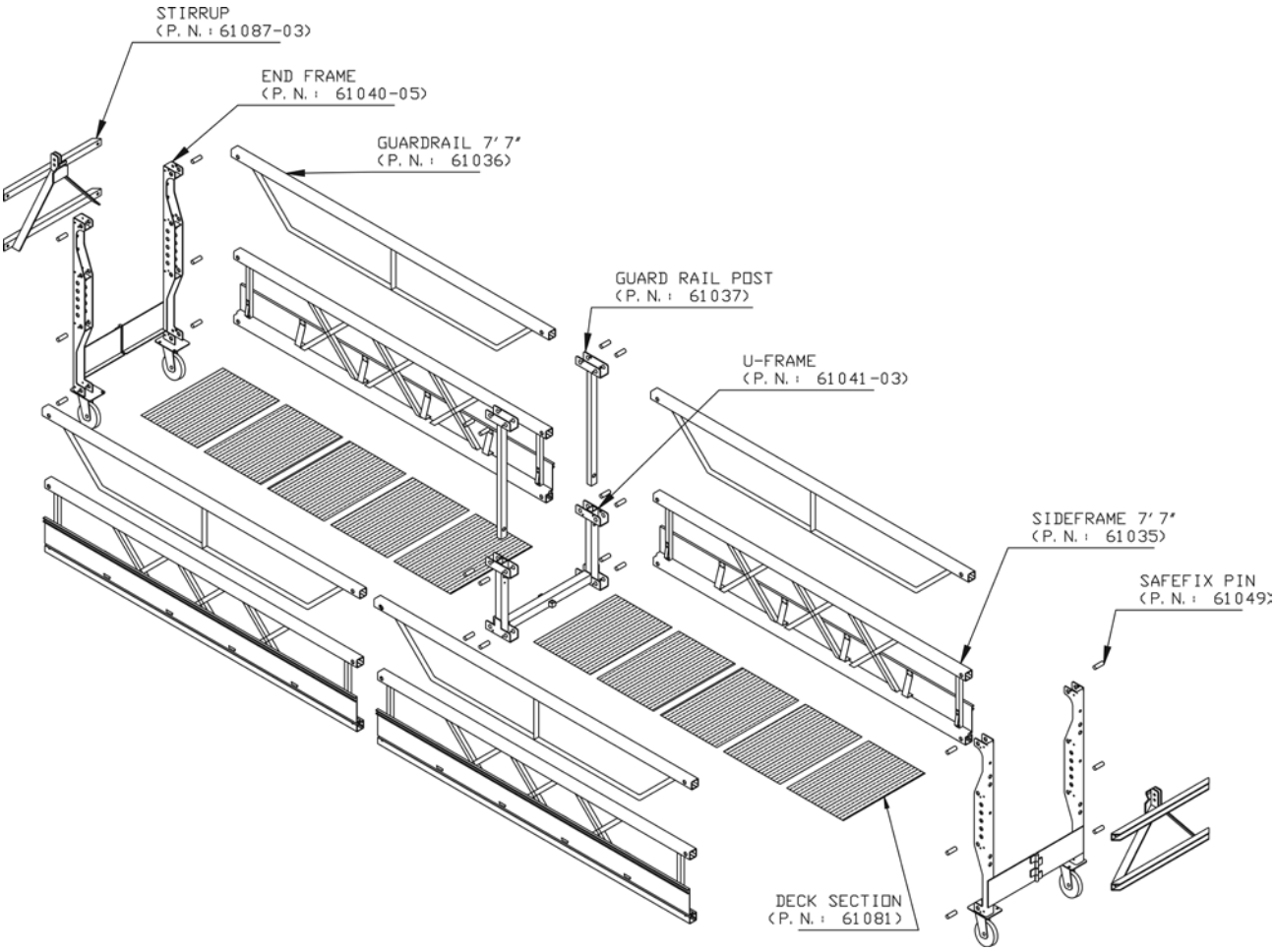
Key Features:

- All components fit through an 18 in. (450 mm) circular opening.
- Walk thru stirrup allows boiler makers to get outside of the hoists to work in the boiler corners.
- Longer platform length–six 7 ft 7 in. (2.3 m) sections create a 45 ft 8 in. (13.9 m) platform with a rated load of 750 lb (340.2 kg).
- Modular floor construction allows for individual piece replacement rather than scrapping the entire section if damaged.
- No additional floor pins needed to secure components–saves time spent rounding up forgotten pins.
- Safe Fix pins are the one step "insert and snap" method of assembling Modulo® platform components. Slotted pins are locked in place by a spring mounted on the U-frame or end frame. The red pin head and horizontal slot assure operators that the pins are fully engaged and the connection between sections is complete.
- Safe Fix pins are lanyarded to the U-frame and end frame to avoid a dropping hazard–no cotter or hitch pin is required.
- Some wall rollers fit in toeboard grooves of the sideframe. Other wall rollers clamp over toeboards.
- Don't see the configuration you need? Contact your Spider professional for more information.

Specifications	
Weight:	See chart below
Dimensions:	See chart below
Construction:	Aluminum sections; steel connectors and end frames

Platform with cantilever (3.3 ft [1 m])

Length	Rated Load/ Self-Weight lb (kgs)	Deck Section 61.081	7 ft 7 in. (2.3 m) Side Frame 61.035	Guard Rail 61.036	U-Frame 61.041-03	Guard Rail Post 61.037	End Frame 61.040-05
7 ft 7 in. (2.3 m)	1,000 (453.6)/280 (127)	5	2	2	-	-	2
15 ft 5 in. (4.7 m)	1,000 (453.6)/420 (190.5)	10	4	4	1	2	2
22 ft 6 in. (6.9 m)	1,000 (453.6)/565 (256.3)	15	6	6	2	4	2
30 ft 7 in. (9.3 m)	1,000 (453.6)/705 (319.8)	20	8	8	3	6	2
38 ft 2 in. (11.6 m)	750 (340.2)/745 (337.9)	25	10	10	4	8	2
45 ft 8 in. (13.9 m)	750 (340.2)/990 (449.1)	30	12	12	5	10	2



Modulo 18 Components

Part Number	Description	Weight (lb) each	Subtotal (kg)	Length (ft)	Length (m)
61.035	Frame; Side; 2.3 m	28	12.7	7.5	2.3
61.035-0837	Frame; Side; 0.95 m	8.8	4	3.1	1.0
61.035-1289	Frame; Side; 1.40 m	14.6	6.6	4.6	1.4
61.035-1741	Frame; Side; 1.85 m	19.6	8.9	6.1	1.9
61.036	Guard rail; 2.3 m	10	4.5	7.5	2.3
61.036-0837	Guard rail; 0.95 m	4.6	2.1	3.1	1.0
61.036-1289	Guard rail; 1.40 m	7.6	3.4	4.6	1.4
61.036-1741	Guard rail; 1.85 m	8.3	3.7	6.1	1.9
61.037	Guard rail; Post	7.4	3.4		
61.040-05	Endframe; Astro	41	18.6		
61.041-03	U-frame	27	12.2		
61.081	Deck; 0.45 m	4	1.8		
61.087-03	Stirrup	22	10.0		
9-3	Stirrup assy; Complete	45	20.4		

Modulo® 18 Configurations

Platform Length		Platform Weight		Platform Rating	Frame; Side; 0.95 m; 61.035-0837	Frame; Side; 1.40 m; 61.035-1289	Frame; Side; 1.85 m; 61.035-1741	Frame; Side; 2.3 m; 61.035	Guard Rail; 0.95 m; 61.036-0837
ft	m	lb	kg	lb (kg)	Qty req'd	Qty req'd	Qty req'd	Qty req'd	Qty req'd
3.1	1.0	190.4	86.4	1,000 (454)	2	0	0	0	2
4.6	1.4	212.0	96.2	1,000 (454)	0	2	0	0	0
6.1	1.9	227.3	103.1	1,000 (454)	0	0	2	0	0
7.5	2.3	251.6	114.1	1,000 (454)	0	0	0	2	0
9.2	2.8	303.9	137.8	1,000 (454)	2	0	2	0	2
10.7	3.3	328.2	148.9	1,000 (454)	2	0	0	2	2
12.1	3.7	349.8	158.7	1,000 (454)	0	2	0	2	0
13.6	4.2	365.1	165.6	1,000 (454)	0	0	2	2	0
15.1	4.6	389.4	176.6	1,000 (454)	0	0	0	4	0
16.7	5.1	441.7	200.4	1,000 (454)	2	0	2	2	2
18.2	5.6	463.4	210.1	1,000 (454)	0	2	2	2	0
19.7	6.0	487.6	221.2	1,000 (454)	0	2	0	4	0
21.2	6.5	502.9	228.1	1,000 (454)	0	0	2	4	0
22.6	6.9	527.2	239.1	1,000 (454)	0	0	0	6	0
24.3	7.4	579.5	262.9	1,000 (454)	2	0	2	4	2
25.7	7.9	601.1	272.7	1,000 (454)	0	2	2	4	0
27.2	8.3	616.4	279.6	1,000 (454)	0	0	4	4	0
28.7	8.8	640.7	290.6	1,000 (454)	0	0	2	6	0
30.2	9.2	665.0	301.6	1,000 (454)	0	0	0	8	0
31.8	9.7	714.6	324.1	750 (340)	0	2	4	4	0
33.3	10.2	729.9	331.1	750 (340)	0	0	6	4	0
34.9	10.7	791.2	358.9	750 (340)	2	2	4	4	2
36.4	11.1	812.8	368.7	750 (340)	0	4	4	4	0
37.7	11.5	802.8	364.1	750 (340)	0	0	0	10	0
39.4	12.0	855.1	387.9	750 (340)	2	0	2	8	2
40.8	12.5	876.7	397.7	750 (340)	0	2	2	8	0
42.3	12.9	892.0	404.6	750 (340)	0	0	4	8	0
43.8	13.4	916.3	415.6	750 (340)	0	0	2	10	0
45.3	13.8	940.6	426.6	750 (340)	0	0	0	12	0

Guard Rail; 1.40 m; 61.036-1289	Guard Rail; 1.85 m; 61.036-1741	Guard Rail; 2.3 m; 61.036	Deck; 0.45 m; 61.081	U-frame; 61.041-03	Guard Rail; Post; 61.037	Endframe 61.040-05	Stirrup 61.087-03**	Cross Beam *Optional 9-3
Qty req'd	Qty req'd	Qty req'd	Qty req'd	Qty req'd	Qty req'd	Qty req'd	Qty req'd	Qty req'd
0	0	0	2	0	0	2	2	2
2	0	0	3	0	0	2	2	2
0	2	0	4	0	0	2	2	2
0	0	2	5	0	0	2	2	2
0	2	0	6	1	2	2	2	2
0	0	2	7	1	2	2	2	2
2	0	2	8	1	2	2	2	2
0	2	2	9	1	2	2	2	2
0	0	4	10	1	2	2	2	2
0	2	2	11	2	4	2	2	2
2	2	2	12	2	4	2	2	2
2	0	4	13	2	4	2	2	2
0	2	4	14	2	4	2	2	2
0	0	6	15	2	4	2	2	2
0	2	4	16	3	6	2	2	2
2	2	4	17	3	6	2	2	2
0	4	4	18	3	6	2	2	2
0	2	6	19	3	6	2	2	2
0	0	8	20	3	6	2	2	2
2	4	4	21	4	8	2	2	2
0	6	4	22	4	8	2	2	2
2	4	4	23	5	10	2	2	2
4	4	4	24	5	10	2	2	2
0	0	10	25	4	8	2	2	2
0	2	8	26	5	10	2	2	2
2	2	8	27	5	10	2	2	2
0	4	8	28	5	10	2	2	2
0	2	10	29	5	10	2	2	2
0	0	12	30	5	10	2	2	2

*Used only when end stirrup location does not line up with rigging point overhead.
** The quantity of 61.087-03 stirrups cannot be reduced if using the 9-3 Cross Beam within 12 inches of the 61.040-05 End Frame.
If using the 9-3 positioned greater than 12 in. from the end frame, then the 61.087-03 stirrup is also required.

MKD2

Designed especially for narrow access situations, the MKD2 is used in boilers, digesters, vessels and all tight places. Unique modular, hinge and pin design allows the MKD2 components to easily fit through 18 in. (457 mm) openings.

- Lightweight, heavy duty aluminum
- Load up to a 40 ft (12.2 m) platform in a small truck
- Load ratings:
  5-30 ft (1.5-9.1 m): load rated at 1,000 lb (453.6 kg)
  35 or 40 ft (10.7 or 12.2 m): load rated at 750 lb (340.2 kg)
- Modular 5 or 10 ft (1.5 or 3 m) sections

Available in rental fleet only

Specifications: Weight & Capacity

Length	Configuration	Total Weight
5 ft (1.5 m)	5	211 lb (95.7 kg)
10 ft (3 m)	10	306 lb (138.8 kg)
15 ft (4.6 m)	10 5	433 lb (196.4 kg)
20 ft (6.1 m)	10 10	510 lb (231.3 kg)
25 ft (7.6 m)	10 5 10	636 lb (288.5 kg)
30 ft (9.1 m)	10 10 10	713 lb (323.4 kg)
35 ft (10.7 m)	10 10 10 5	840 lb (381 kg)
40 ft (12.2 m)	5 10 10 10 5	966 lb (438.2 kg)

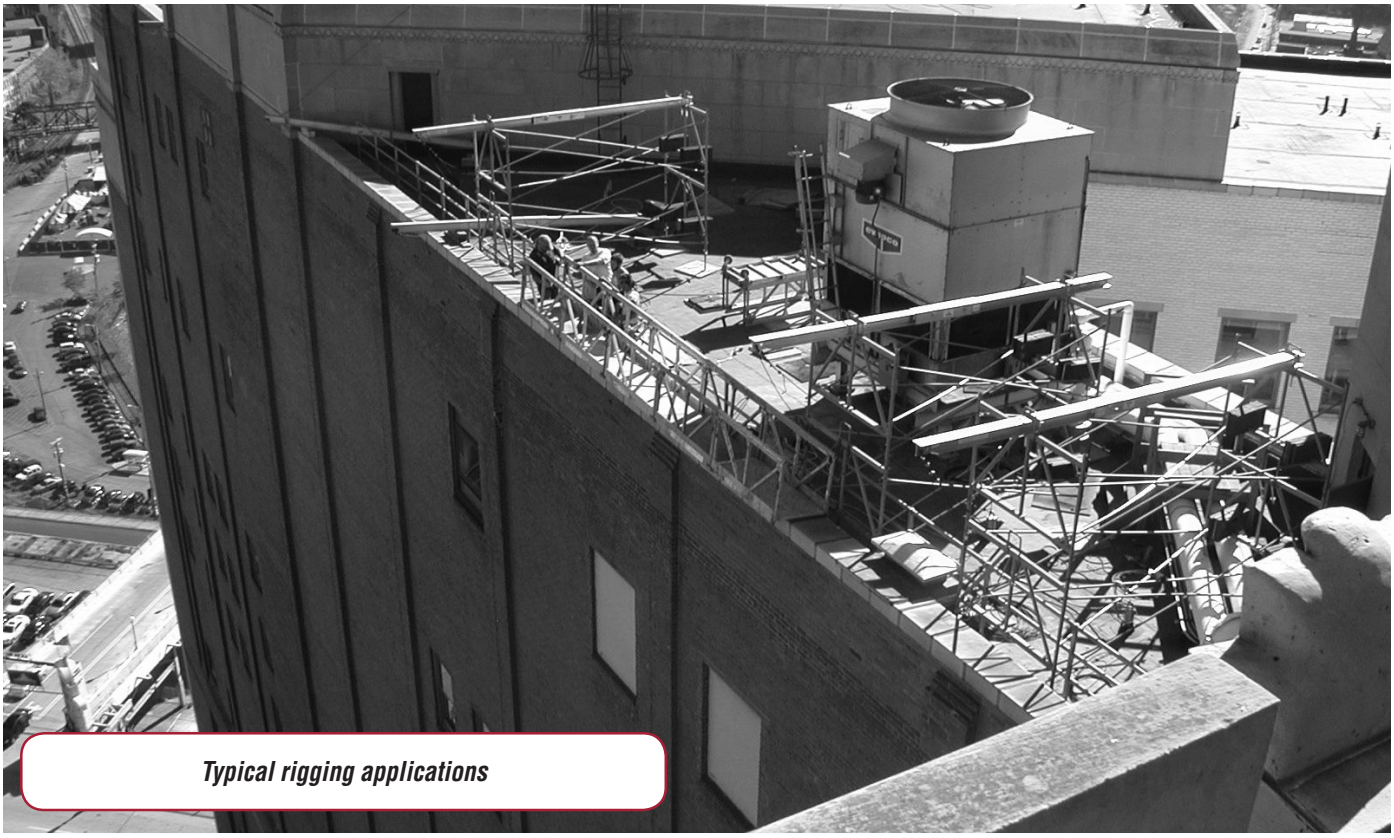
Also Available	
Spider Part #	**MKD2 Components**
MKD011	2 1/2 ft (0.8 m) Floor
MKD012	2 1/2 ft (0.8 m) Side Panel
MKD013	2 1/2 ft (0.8 m) Top Rail (used as mid and top rails)

Frequently used accessories:
Ground any platform with 701151-1
Safety Welding Ground on page 133.

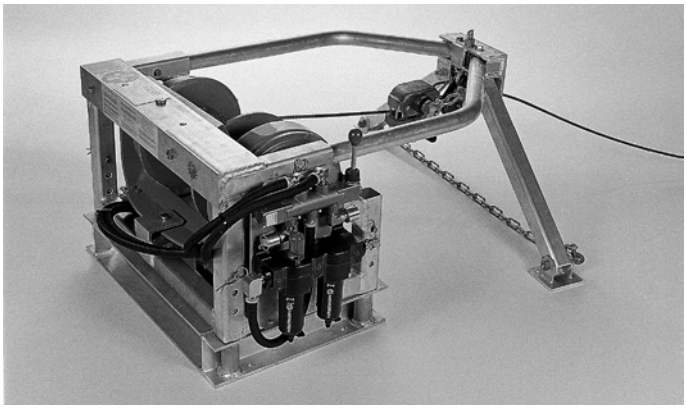
MKD2 Configurations

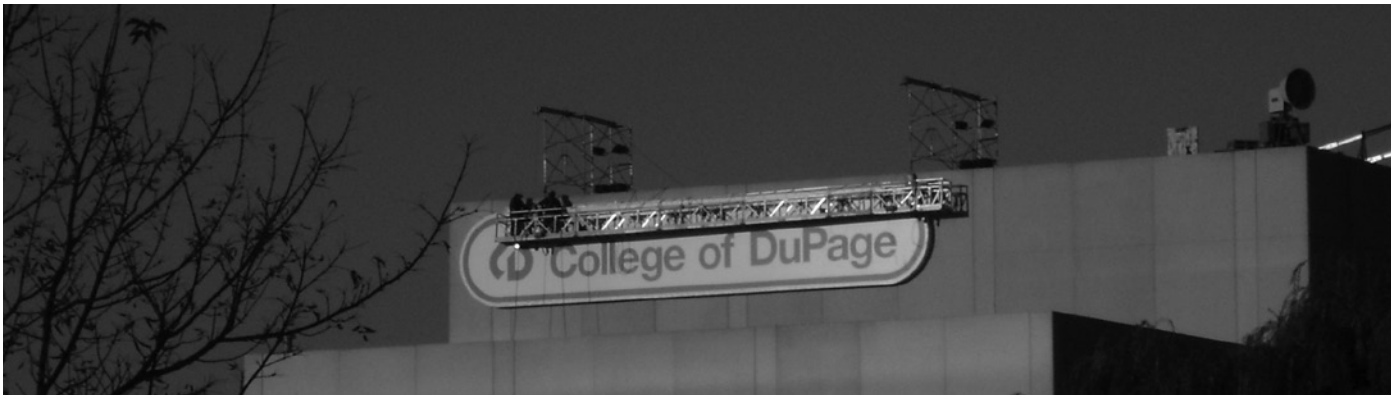
Length	End Stirrup MKD001	Connect Frame MKD006	Floor		Side Panel		Side Rail		Floor Pins MKD010	Wall Roller MKD009R
			10 ft (3 m) MKD003	5 ft (1.5 m) MKD002	10 ft (3 m) MKD008	5 ft (1.5 m) MKD007	10 ft (3 m) MKD005	5 ft (1.5 m) MKD004		
5 ft (1.5 m)	2	-	-	1	-	2	-	2	2	2
10 ft (3 m)	2	-	1	-	2	-	2	-	2	2
15 ft (4.6 m)	2	1	1	1	2	2	2	2	4	2
20 ft (6.1 m)	2	1	2	-	4	-	4	-	4	2
25 ft (7.6 m)	2	2	2	1	4	2	4	2	5	2
30 ft (9.1 m)	2	2	3	-	6	-	6	-	5	2
35 ft (10.7 m)	2	3	3	1	6	2	6	2	8	2
40 ft (12.2 m)	2	4	3	2	8	4	8	4	10	2

Notes



Typical rigging applications





Disclaimers

- The content contained in this catalog is for informational purposes only. For actual specifications, illustrations and information, consult the Operators Manual or a Spider professional.
- Information is subject to change.
- Not all products are available in all areas. Consult your Spider professional for availability.

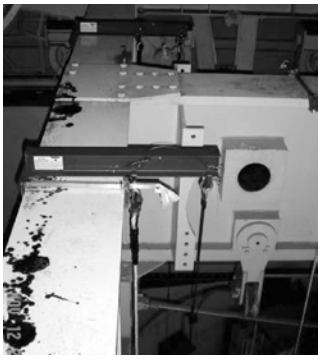
Overview

A word about Spider rigging devices… Trustworthy

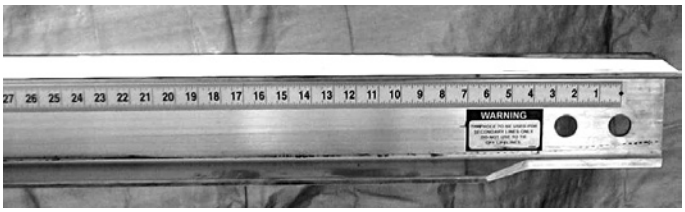
Rigging of suspended scaffolds all comes down to the support devices from which the stage hangs. There is no room to scrimp on this vital part of your suspended system. Know what you're getting and demand the best. For over 65 years, Spider has been building quality rigging devices in the USA. We were first to market and fast to innovate at the request of customers for applications that needed that extra performance to make their work more productive.

We continue to custom design rigging devices today.

There is a difference when it comes to rigging devices. Look for devices that meet the ANSI/SSFI SPS 1.1-1/03 standard. Spider assisted in pioneering this standard to help contractors evaluate rigging products that are built to a common testing and labeling standard. It's the sign of quality.



Beams



Extend your outreach by up to 8 ft (2.4 m) and 1,000 lb (453.6 kg) by adding the 5x5 Max Reach Assembly.

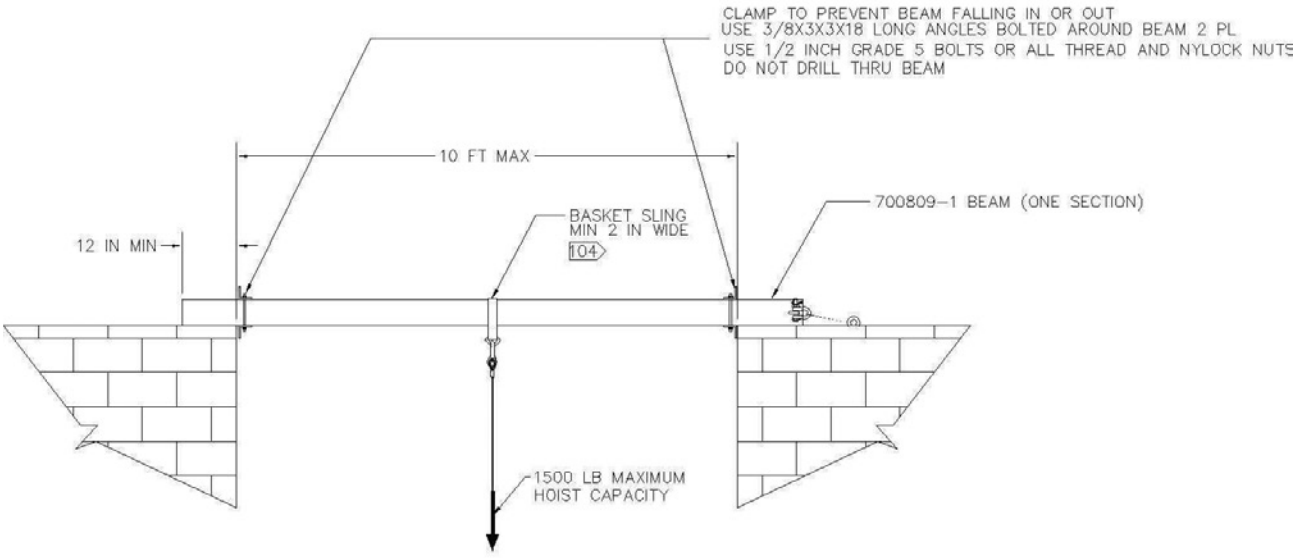
See page 98 for details.

5 x 5 Outrigger Beam Key Features:

- 3 different configurations for overall length:
  - 16 ft (4.9 m), 22 ft (6.7 m) and 25 ft (7.6 m)
- The longest possible outreach available without extra parts
  - 74 in. (1,880 mm) when used with a 750 lb. (340.2 kg) hoist
  - 66 in. (1,676 mm) when used with a 1,000 lb. (453.6 kg) hoist
  - 54 in. (1,372 mm) when used with a 1,250 lb. (567 kg) hoist
  - 48 in. (1,219 mm) when used with a 1,500 lb. (680.4 kg) hoist
- No truss systems to lose, forget or learn how to set up
- No tools needed for assembly; uses the first splice tube assembly ever developed
- Safety labels insure proper set up
- Measuring tape label system determines outreach instantly
- Beams are designed to accept two wire ropes for secondary wire rope safety systems. This decreases the equipment needed for 4-line systems.
- Extensive product labeling makes set up goof-proof.
- Front and rear beams are identical, reducing the chance of loading the wrong parts on the truck.
- Counterweight chart label shows how many 50 lb. (22.7 kg) weights are required for your outreach: No guesses, no math
- Works with all Spider outrigger stands and most other stands
- Built by Spider in the USA

Optional accessories:

- Beams can be used with SA-10842 Adjustable Outrigger Stand
- Can also be used with outrigger towers, gantry frames and assorted rigging accessory products as shown on the following pages.



Portable Outrigger Beams

Part Number	Description	Total Length	Maximum Reach	For more information
8-0217-6	5 x 5 Outrigger Beam	16 ft (4.9 m) [2 x 8 ft (2.4 m)] with splice tube	74 in. (1,880 mm) @ 750 lb (340.2 kg) 66 in. (1,676 mm) @ 1,000 lb (453.6 kg) 54 in. (1,372 mm) @ 1,250 lb (567 kg) 48 in. (1,219 mm) @ 1,500 lb (680.4 kg)	See page 110
8-0217-7	5 x 5 Outrigger Beam	22 ft (6.7 m) [2 x 8 ft (2.4 m) beams, plus 9 ft (2.7 m) splice tube]	74 in. (1,880 mm) @ 750 lb (340.2 kg) 66 in. (1,676 mm) @ 1,000 lb (453.6 kg) 54 in. (1,372 mm) @ 1,250 lb (567 kg) 48 in. (1,219 mm) @ 1,500 lb (680.4 kg)	See page 110
8-0217-5	5 x 5 Outrigger Beam	25 ft (7.6 m) [3 x 8 ft (2.4 m) beams, plus 2 x 3 ft (0.9 m) splice tubes]	74 in. (1,880 mm) @ 750 lb (340.2 kg) 66 in. (1,676 mm) @ 1,000 lb (453.6 kg) 54 in. (1,372 mm) @ 1,250 lb (567 kg) 48 in. (1,219 mm) @ 1,500 lb (680.4 kg)	See page 110
700809-1	6 in. (152 mm) Square Tube, 1/4 in. (6 mm) Wall Outrigger Beam	24 ft (7.3 m) [2 x 12 ft (3.7 m)]	84 in. (2,134 mm) @ 1,000 lb (453.6 kg) 72 in. (1,829 mm) @ 1,250 lb (567 kg) 60 in. (1,524 mm) @ 1,500 lb (680.4 kg)	See page 112
700819-1	6 in. (152 mm) Square Tube, 1/2 in. (13 mm) Wall Outrigger Beam	30 ft (9.1 m) [1 x 10 ft (3 m) and 1 x 20 ft (6.1 m)]	135 in. (3,429 mm) @ 1,000 lb (453.6 kg) 114 in. (2,896 mm) @ 1,250 lb (567 kg) 102 in. (2,591 mm) @ 1,500 lb (680.4 kg)	See page 113

Call or click for more information
1-877-774-3370
www.spiderstaging.com

Down Under Assembly (704258-2)

Engineered system to locate the rigging point down a vertical span and under a horizontal distance to access walls under deep cornices, caps or architectural features. Down height available is adjustable from 48 to 96 in., and horizontal (under) reach is 36 in. (914 mm) to 60 in. (1,524 mm) with a 1,500 lb. (680.4 kg) maximum hoist capacity.

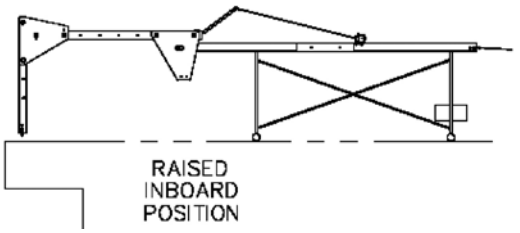
Key Features:

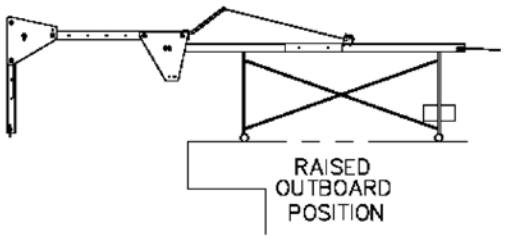
- Simple system to set-up and deploy saves time
- Mechanical winch allows for no-power deployment
- With optional drill to speed installation, set-up takes minutes
- More stable construction improves worker confidence and production rates
- More under reach than competitors: Spider offers 5 ft. (1.5 m) vs. their 4 ft. (1.2 m)
- Step-by-step set-up instruction labels eliminate guesswork
- Engineered and fully tested to meet ANSI SPS 1.1
- Assembly includes 704411-1 Hook
- Made by Spider in the USA

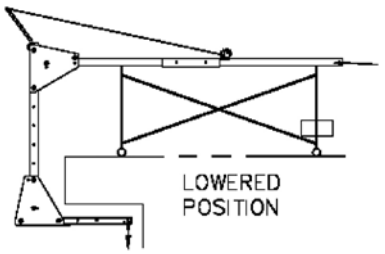
For use with 5x5 outriggers, gantry frames, OBSF, and suitable scaffold frames.

Longer down lengths available by special order.

Specifications:	704258-2
Outreach:	Down: 48-96 in. (1,219-2,438 mm) Under: 36-60 in. (914-1,524 mm)
Weight:	291 lb (132 kg)
Max. hoist capacity:	1,500 lb (680.4 kg)
Heaviest piece:	49 lb (22.2 kg)
Aluminum and steel construction	







Corner Support Post (701877-1)

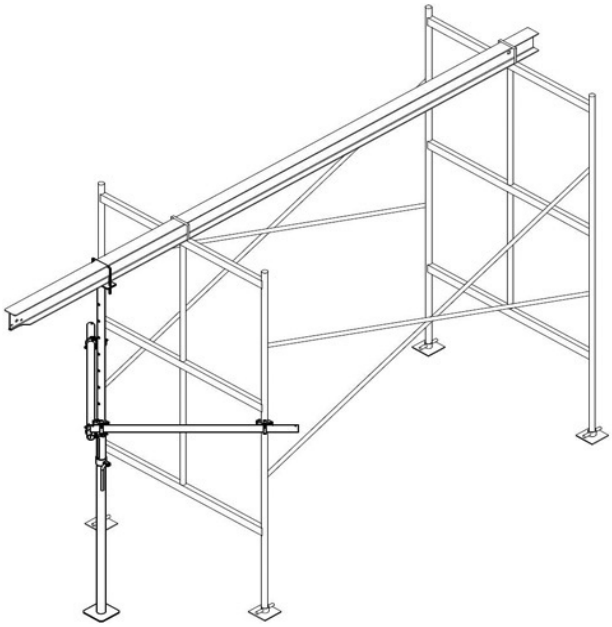
Extends reach of current outrigger beams by moving fulcrum point forward into building corners.

Key Features:

- For use in building corner applications to shorten the reach needed from available beams
- For use with all 4x4 SA-1088, 6x4 and 5x5 8-0217-x series beams, 700809-1 & 700819-1 6 in. (152 mm) square tube beams
- Attaches to: OBSF Frame A-11393, Rolling Outrigger Gantries 701960-1 and 701960-2
- Enables the use of corner-mounted hoist in the 008812-1 Adjustable Corner Adapter to improve stability, load capacity, and load distribution on angle platforms
- Allows beam fulcrum point to be extended into corners and limited spaces where gantries and frames cannot reach
- Can be used with 2 stacked OBSF frames at maximum height
- Heavy duty steel construction
- Thorough labeling ensures worry-free installation
- Height completely adjustable from 5 ft. 5 in. (1.7 m) to 9 ft. 4 in. (2.8 m)
- Made by Spider in the USA

Specifications:	**701877-1**
Load Rating:	Up to 1,500 lb (680.4 kg)
Weight:	94 lb (42.6 kg) in 3 pieces, heaviest piece = 54 lb (24.5 kg)
Outreach:	see beam specifications

Standard Scaffold Clamp allows attachment to: OBSF Frame A-11393, 701960-1, 701960-2, and gantry frames.



5x5 Max Reach Assembly (704241-1 & -2)

Engineered, simple system extends outreach using standard 5x5 outrigger beams up to 8 ft. (2.4 m) at 1,000 lb (453.6 kg)

Key Features:

- Get more reach and eliminate the hassle of cable-tensioned devices and risk of their improper set-up
- Simpler installation – set channels in beam web, pin using splice tube pins, slide collars over the ends of the channels and tighten – no drilling!
- Easily retrofits to standard 5x5 outriggers
- No need to buy and stock a specialized beam when more reach is needed
- Complete step-by-step set-up labels eliminate guesswork
- Engineered and fully tested to meet ANSI SPS 1.1
- Made by Spider in the USA

Specifications:	**704241-1 & 2**
Outreach:	8 ft. (2.4 m) at 1,000 lb (453.6 kg) 6 ft. 4 in. (1.9 m) at 1,250 lb (567 kg) 5 ft. 4 in. (1.6 m) at 1,500 lb (680.4 kg)
Weight:	54.8 lb (24.9 kg)
Heaviest piece:	19.4 lb (8.8 kg)
Aluminum and steel construction	

To use as a simply supported beam, on OBSF or suitable scaffold towers*, order 704241-1. To use with 701960-1 gantry frames, order 704241-2. (Gantry head to accept 5x5 Max Reach also available separately as 704387-1.)

8-0217-5 5x5 Outrigger Kit sold separately

***Be sure to verify leg loads can accept fulcrum load**

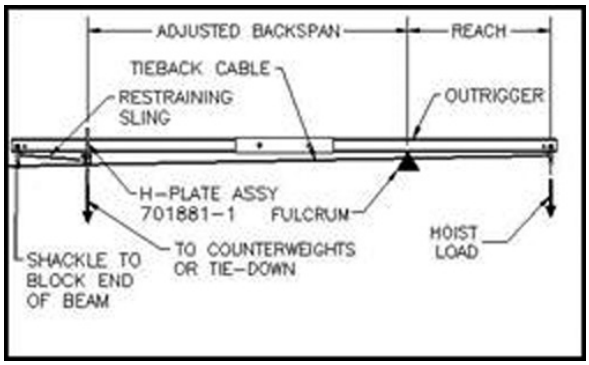
Call or click for more information
1-877-774-3370
www.spiderstaging.com

H-Plate Assembly (701881-1)

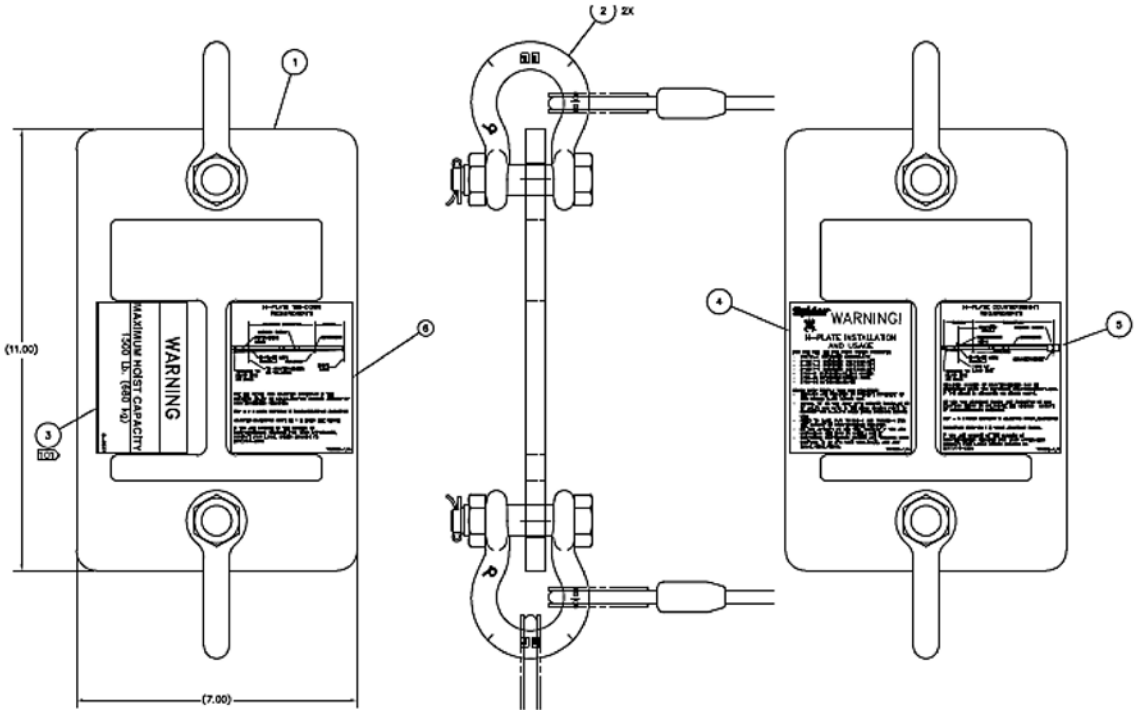
Engineered connection to adjust outrigger beam rigging point and/or backspan to fit jobsite conditions.

Key Features:

- Allows user to reduce backspan where space is limited by balconies, walkways or other obstructions
- Allows user to adjust the backspan to tie the beam directly down to a structural anchor
- Allows user to reduce the beam outreach to reduce counterweights used
- Heavy duty steel construction
- Used with 6x4, 8-0217-5/6/7 5x5 and 4720-01/-02/-34 outrigger beam assemblies
- No tools installation
- Tieback required, block end of beam with 5/8 in. (16 mm) shackle at usual rigging point
- Shackles included
- Thorough labeling simplifies worry-free installation
- Made by Spider in the USA



Specifications:	701881-1
Load Rating:	1,500 lb (680.4 kg)
Weight:	4 lb (1.8 kg)
Dimensions:	7 x 11 x 1/2 in (178 x 279 x 13 mm)
Outreach:	Per Outrigger Beam
Backspan:	Min. is 1.5 times outreach

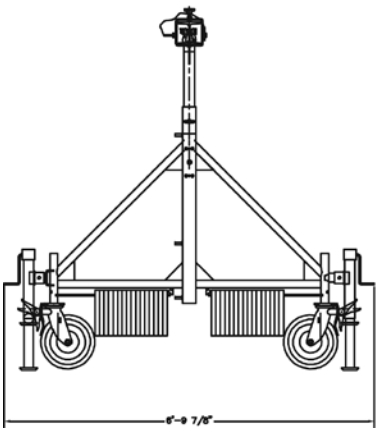


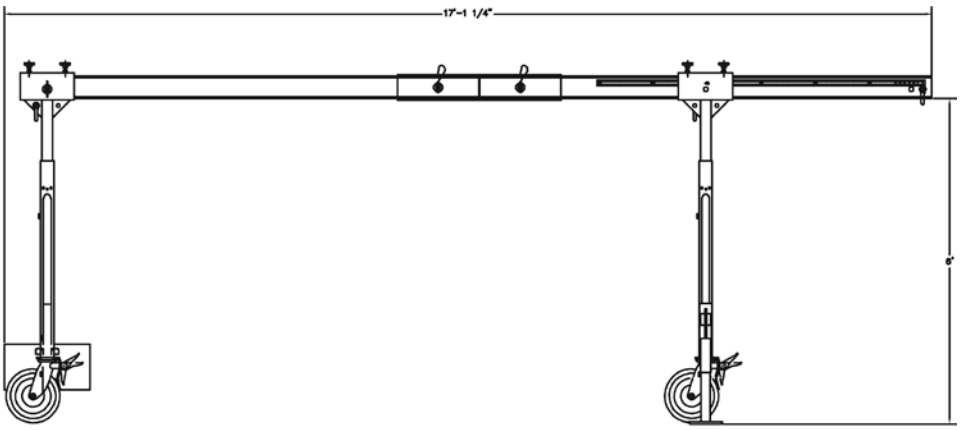
Rolling & Fixed Outrigger Gantry Stands
(701960-1 & 701960-2)

Specifications:	701960-1
Load/Capacity:	8,400 lb (3,810 kg) fulcrum load
Weight:	65 lb (29.5 kg) heaviest single piece
Outreach:	750 lb (340.2 kg) at 74 in. (1,880 mm) each 1,000 lb (453.6 kg) at 66 in. (1,676 mm) each 1,250 lb (567 kg) at 54 in. (1,372 mm) each 1,500 lb (680.4 kg) at 48 in. (1,219 mm) each
Dimensions:	6 ft (1.8 m) wide 4 ft (1.2 m) minimum height 6 ft (1.8 m) maximum height under the beam

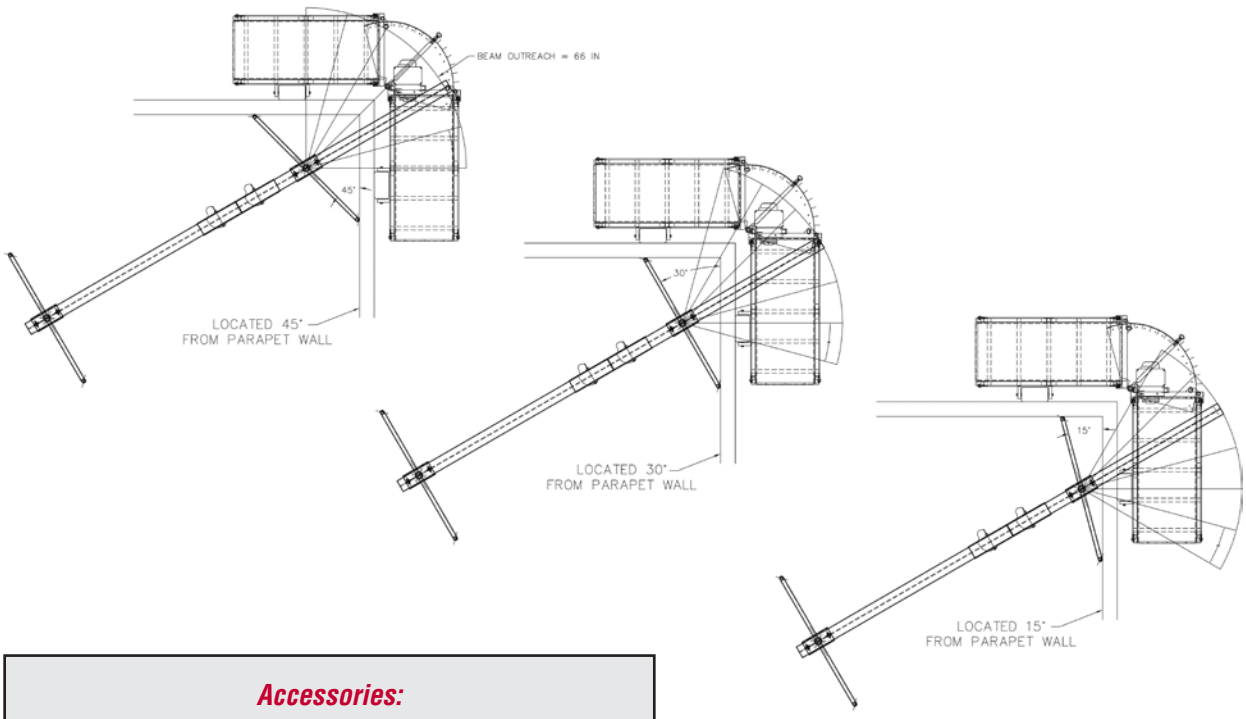
Key Features:

- Clears 6 ft (1.8 m) walls
- Available as a rolling outrigger system (701960-1) with casters and jacks or as a simple frame with screw jacks and base plates (701960-2)
- Accepts 8 in. (203 mm) 750 lb. (340.2 kg) capacity (A-11394) or 12 in. (305 mm) 1,200 lb. (544.3 kg) casters (A-11835)
- Compatible with all Spider 5 x 5 beam assemblies (8-0217-XX)
- Uses counterweight quantities as listed on beam label - no counterweight formula required
- Support head telescopes vertically in 12 in. (305 mm) increments to clear varying parapet heights and allow multiple rigs to be stacked into corners
- Head angle adjustable in 15º increments from 0º to 45º to reduce beam reach in corners
- Combination of clearance and rotating heads permits travel around most roof mounted building components (HVAC units, antennas, transmitters, etc.)
- Increased beam height using Outrigger Beam Support frames (A-11393) or scaffold frames and cross brace
- Space for up to 3,200 lb (1,451.5 kg) of counterweights on frame
- Shackle anchorage point for tieback cables, connection to roof top structural members or counterweights placed on the roof surface
- Maximum of 1,000 lb (453.6 kg) of counterweight permitted when rolling to next drop
- Built by Spider in the USA



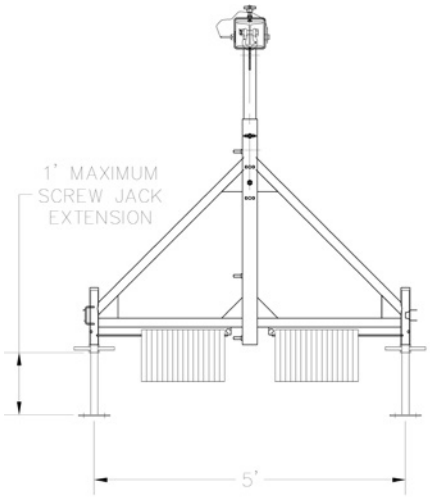


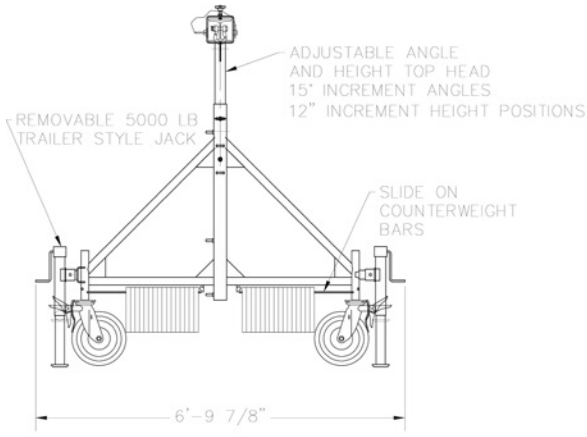
Refer to outrigger counterweight and fulcrum point load charts for leg loads.
The fulcrum and counterweight loads are split evenly between each leg.

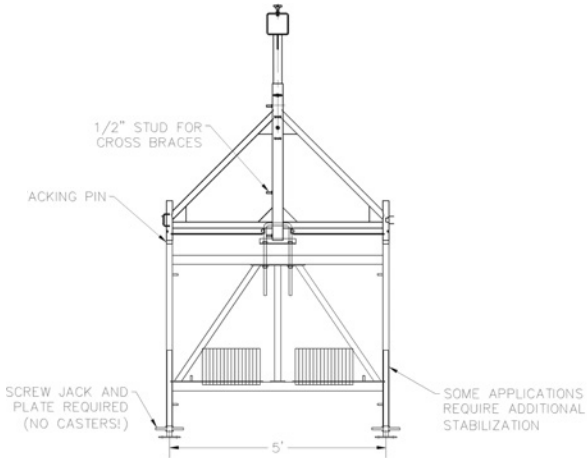


Accessories:

Casters: A-11394 8 in. (203 mm) or A-11835 12 in. (305 mm)

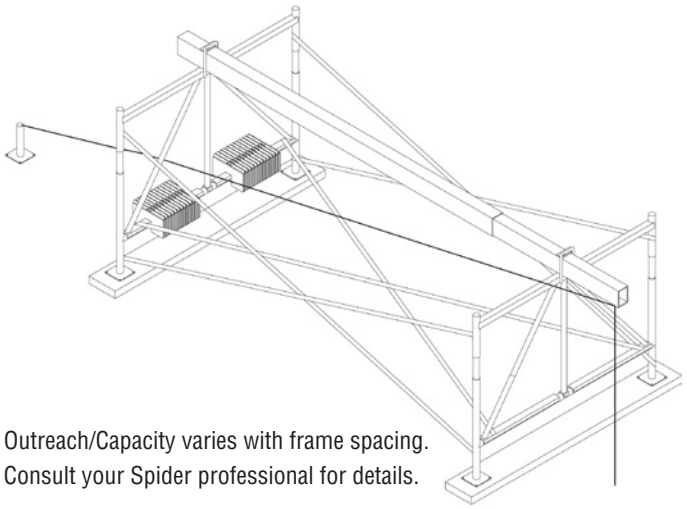






Outrigger stands combine with scaffold tower to clear higher parapet.

Outrigger Beam Support Frame

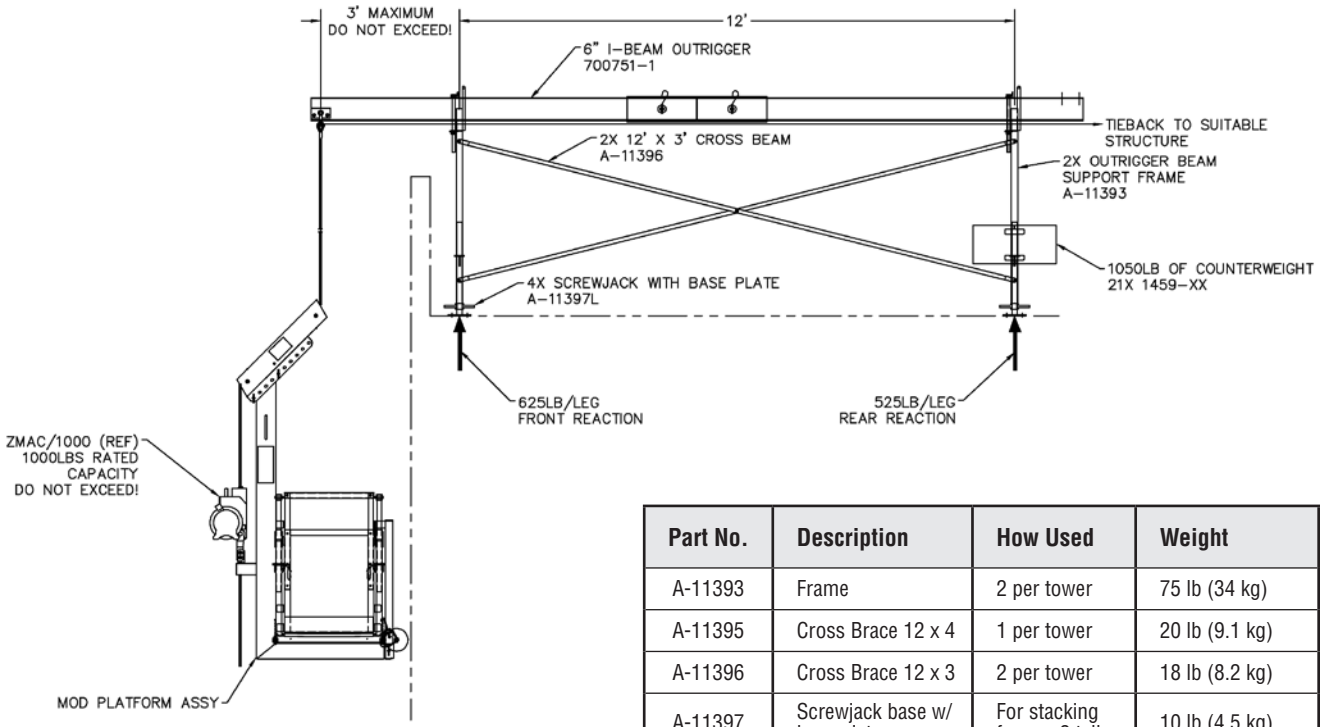


Outreach/Capacity varies with frame spacing.
Consult your Spider professional for details.

Heavy duty steel frames stack in 4 ft 2 in. (1.3 m) increments for high parapet wall clearance with 8-0217 series, 700809-1 and 700819-1 beams.

Key Features:

- Frame configurations available with base plates or casters
- Loading available for 1,000, 1,250 and 1,500 lb. (453.6, 567 and 680.4 kg) capacities depending on frame spacing and beam length
- Can be stacked multiple tiers high when completed by qualified person
- Extensive assembly instructions cover frame sizing, beam outreach (cantilever), suspended load available and allowable leg loads – makes set-up goof-proof



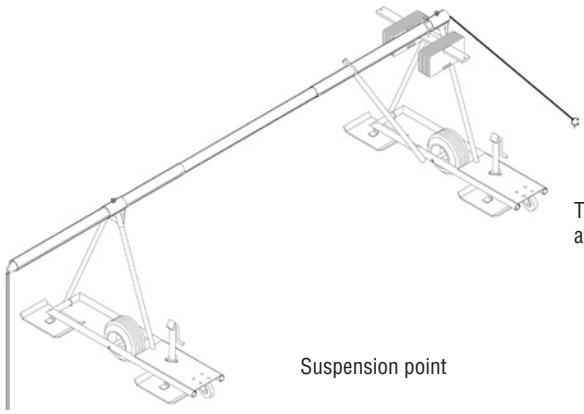
Specifications:	Part Numbers at Right
Load/Capacity:	1,000-1,500 lb (453.6-680.4 kg)
Load/Capacity of Casters:	A-11394: 750 lb (340.2 kg) max A-11835: 1,200 lb (544.3 kg) max
Weight:	75 lb (34 kg)
Outreach:	Dependent on which beam is used
Construction:	Steel

Part No.	Description	How Used	Weight
A-11393	Frame	2 per tower	75 lb (34 kg)
A-11395	Cross Brace 12 x 4	1 per tower	20 lb (9.1 kg)
A-11396	Cross Brace 12 x 3	2 per tower	18 lb (8.2 kg)
A-11397	Screwjack base w/ base plate	For stacking frames 2 tall	10 lb (4.5 kg)
A-11394	Caster	For rolling towers	16 lb (7.3 kg)
A-11398	Coupling Pin	For stacking frames 2 tall	1 lb. (0.5 kg)
A-11835	12 in. (305 mm) Caster	For rolling towers	24 lb (10.9 kg)
P-00248	Assembly instructions - for base plate and screwjack applications		
P-00249	Assembly instructions - for caster applications		

Aluminum Tube Outrigger (SA-3728)

Available in rental fleet only

Specifications:	SA-3728
Load/Capacity:	1,000 lb (453.6 kg)
Weight:	385 lb (174.6 kg)
Outreach:	14-55 in. (355-1,397 mm) in 2 in. (51 mm) increments
Construction:	Aluminum extrusion and steel



Key Features:

- Clears a 52 in. (1,320 mm) parapet; adjusts to lengths of 16, 19 and 22 ft (4.9, 5.8 and 6.7 m)
- Large pneumatic tires roll easily on smooth and some uneven surfaces.*
- For use on flat surfaces
- Easy to transport and assemble
- Extensive labels show step by step assembly instructions with photographs for goof-proof installation.
- Counterweight chart label shows how many 50 lb. (22.7 kg) weights are required for your outreach – No guesses, no math
- Beams can be used without rolling stanchions if properly braced. Contact your Spider professional for details.
- Built by Spider in the USA

* *Some roof surfaces will need to be covered with plywood for roof protection and easy rolling.*

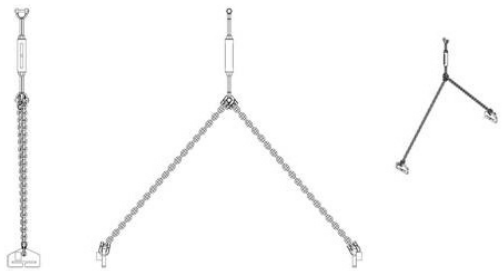
Counterweight Beam Sling (701878-1)

Save significant rigging time and effort by locating current counterweight bar 8-0285 on roof deck or structure. Weights slide easily onto counterweight bar eliminating the need to lift weight higher than waist level.

Key Features:

- Heavy duty steel construction
- No tools required for installation
- Turnbuckle included
- Thorough labeling ensures worry-free installation
- Use with 8-0285 counterweight bar, found in 8-0217 series 5 x 5 outrigger assemblies
- May reduce the number of counterweights needed when using OBSF A-11393 or Outrigger Gantries 701960-1 & 701960-2
- Built by Spider in the USA

Specifications:	701878-1
Load Rating:	2,500 lb (1,134 kg)
Weight:	16 lb (7.3 kg)



Install counterweights onto 8-0285 then slide sling onto ends of counterweight bar.

Final installation shown above, counterweights not shown.

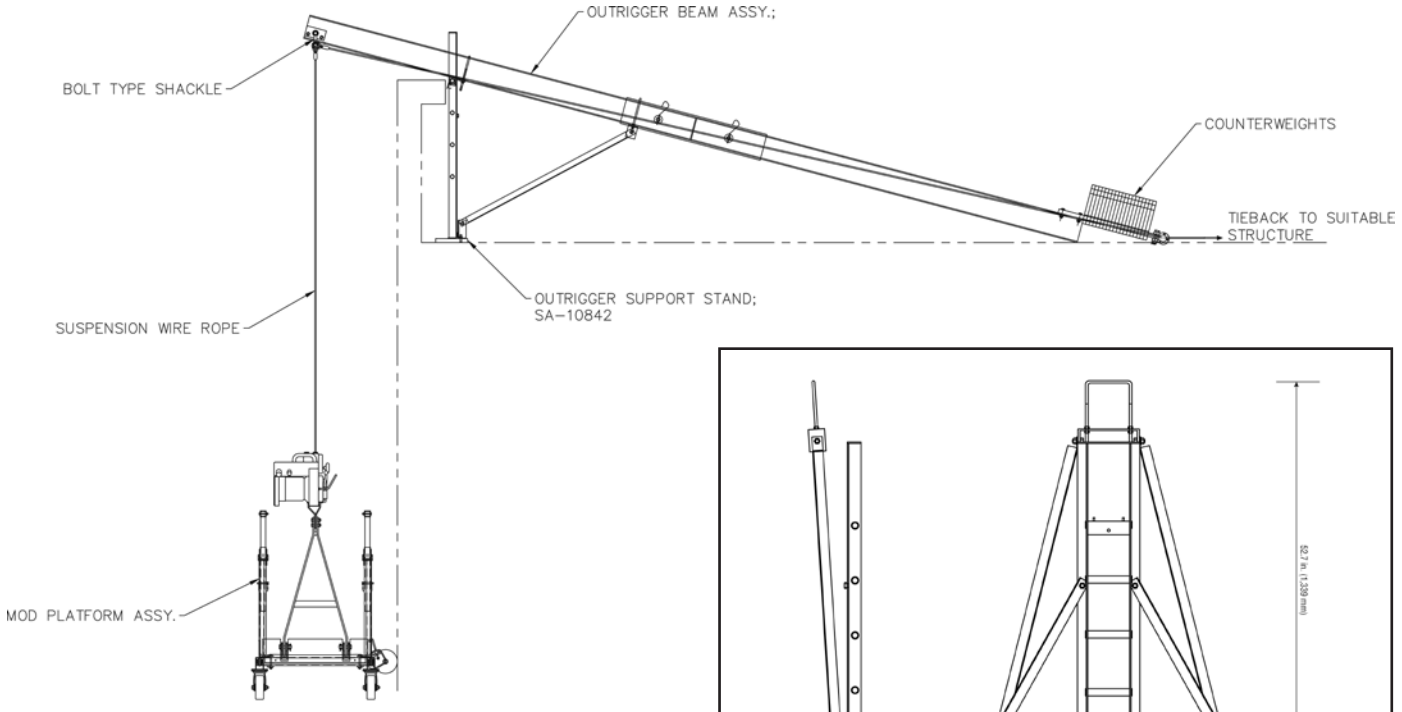
8-0285 counterweight bar included in 8-0217-xx assembly.

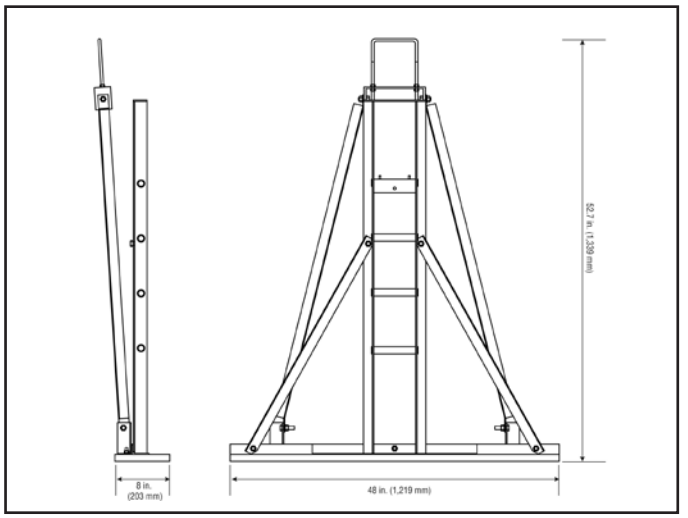
Adjustable Support Stands (SA-10842 & 1258-1)

Key Features:

- Elevates outrigger beam up to 48 in. (1,219 mm) total height; beam positions at 16, 24, 32 and 40 in. (406, 610, 813 and 1,016 mm)
- U-Bolt connection secures beam to stand.
- Wide support base lessens the ability to overturn.
- 49 in. (1,245 mm) base height
- SA-10842 for use with all 8-0217 Series Beams, 700809-1 and 700819-1 6 in. (152 mm) Square Tube Outrigger Beams
- Update an older SA-10842 configured to the 6 x 4 beams to now accept 5 x 5 beams using a 701966-1
- Built by Spider in the USA

Specifications:	SA-10842
Dimensions:	48 x 8 x 52.7 in. (1,219 x 203 x 1,339 mm)
Weight:	55 lb (25 kg)
Construction:	Steel with plywood bracing components



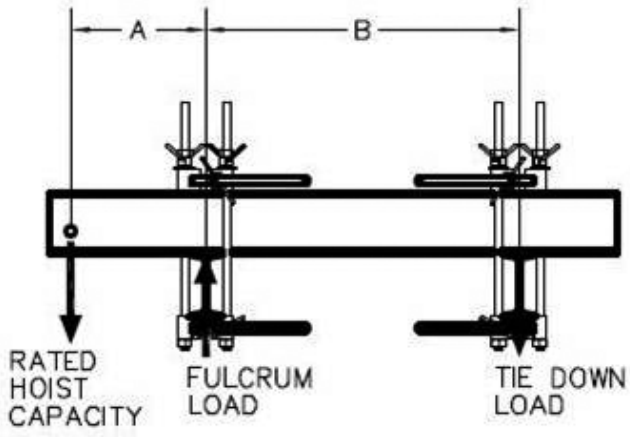


Beam Tie-Down System (702096-1)

Specifications:	702096-1
Load/Capacity:	4,000 lb. (1,814.4 kg) clamping load with 1,500 lb. (680.4 kg) hoist
Weight:	26 lb (11.8 kg)
Outreach (A):	Per Outrigger label
Backspan (B):	Minimum is 1.5 times Outreach

Key Features:

- Engineered connection to replace all sandwich or fish plates, gantries, frames and counterweights when typing beam directly to structural steel. (Tieback required.)
- One size fits all – accommodates a wide range of beam flange widths
- Clamps outrigger beams to structural steel
- Rated for use with 1,500 lb. (680.4 kg) hoists
- Built by Spider in the USA



Call or click for more information
1-877-774-3370
www.spiderstaging.com

Splice Tubes

700757-1*

Spider pioneered the 3 ft (0.9 m) splice tube and now makes a 9 ft (2.7 m) splice tube to replace cumbersome splice plates held in place with nuts and bolts. The time saving splice tubes can be used on 6 x 4 and 5 x 5 H or I beams.

Key Features:

- No tools needed for assembly
- Simple locking pin design makes connecting fast and easy.
- Saves 30 minutes of rigging installation time per swing stage
- Eliminates rework of misaligned bolt patterns
- Built by Spider in the USA

8-0217-3

Part Number	700757-1*	8-0217-3	8-0217-4
Length:	3 ft (0.9 m)	3 ft (0.9 m)	9 ft (2.7 m)
Weight:	13 lb (5.9 kg)	13 lb (5.9 kg)	39 lb (17.7 kg)
Construction:	Aluminum extrutsion	Aluminum extrutsion	Aluminum extrutsion
Replaces Splice Plates on:	6 x 4 Beam Outriggers sold as SA-10841	5 x 5 Beam Outriggers sold by others	5 x 5 Beam Outriggers sold by others
Instructions:	Includes label and drawing to modify existing beam	Contact your Spider professional	Contact your Spider professional
Assembly Labels:	Order kit 700918-1 for complete label set for 700750-1*	Labeled with load ratings and counterweight chart	Labeled with load ratings and counterweight chart

*Available in rental fleet only

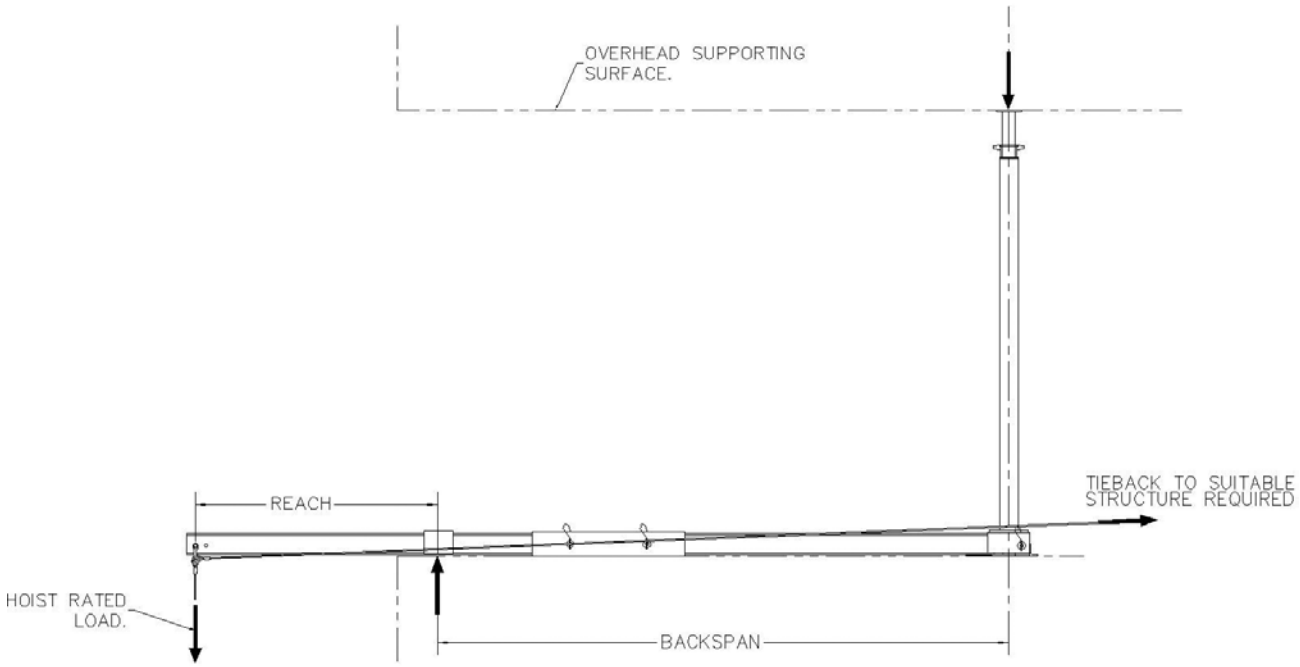
8-0217-4

Post Shore System (704099-1)

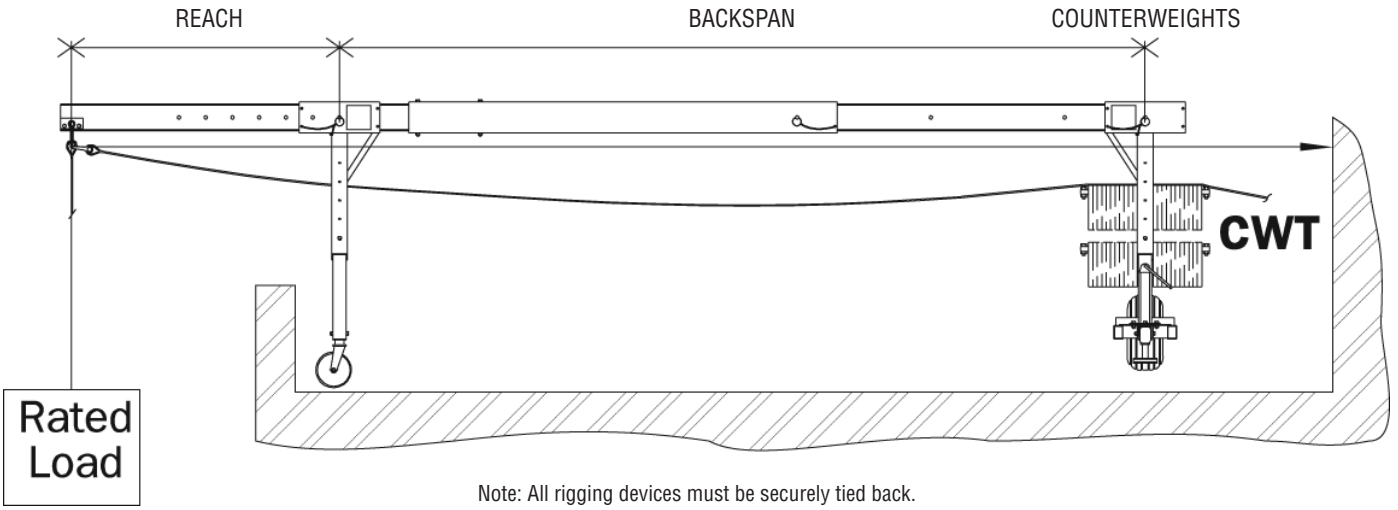
Specifications:	704099-1
Load/Capacity:	5,450 lb (2,472.1 kg) @ 10 ft 10 in. (3.3 m) extension
Weight:	76 lb (34.5 kg)
Outreach:	750 lb (340.2 kg) @ 74 in. (1,880 mm) reach 1,000 lb (453.6 kg) @ 66 in. (1,676 mm) reach 1,250 lb (567 kg) @ 54 in. (1,372 mm) reach 1,500 lb (680.4 kg) @ 48 in. (1,219 mm) reach
Dimensions:	Up to 10 ft 10 in. (3.3 m) maximum height; 6 ft (1.8 m) minimum

Key Features:

- For use in concrete slab applications
- Eliminates the need for counterweights
- Rated for use with 1,500 lb. (680.4 kg) hoists and 4 ft (1.2 m) of reach
- Call your Spider professional for details



Counterweight Formula



Note: All rigging devices must be securely tied back.

$$\text{Counterweights} = \frac{(4) \times (\text{Rated hoist capacity}) \times (\text{Reach})}{(\text{Backspan})}$$

Labels on all Spider devices requiring counterweights provide actual number of 50 lb. (22.7 kg) weights needed or total counterweight required for each reach. No guesses. No math!

Consult your Spider professional for custom-engineered rigging solutions

Call or click for more information
1-877-774-3370
www.spiderstaging.com

How to Read an Outrigger Counterweight Chart or Fulcrum Point Load Chart

Counterweight Charts:

- Find the outreach distance you need ('Reach') in the top row of the chart.
- Find the rated load you need ('Hoist Rated Load') at the left of the chart.
- The box at which this row and column meet indicates the number of 50 lb. counterweights that are required.

Example:

If you need a 72" reach and 1250 lb. rated load, 34 50 lb. counterweights are required.

Reach (in.)

Hoist Rated Load (lb)	84"	78"	72"
1000	33	31	27
1250	Not Allowed	Not Allowed	34
1500	Not Allowed	Not Allowed	Not Allowed

Fulcrum Point Load Charts:

- Find the outreach distance you need ('Reach') in the top row of the chart.
- Find the rated load you need ('Hoist Rated Load') at the left of the chart.
- The box at which this row and column meet indicates the point load in number of pounds that will be placed on the rooftop at the fulcrum with this configuration, assuming a 4 to 1 required safety standard.

Example:

If you need a 72" reach and 1250 lb. rated load, the point load on the roof will be 6,700 lb at the fulcrum.

Reach (in.)

Hoist Rated Load (lb)	84"	78"	72"
1000	5650	5550	5450
1250	Not Allowed	Not Allowed	6700
1500	Not Allowed	Not Allowed	Not Allowed

8-0217-5, 8-0217-6, 8-0217-7

5 x 5 outrigger beam

Outrigger Counterweight Chart

Reach (in.)

Hoist Rated Load (lb)	74"	66"	60"	54"	48"	42"	36"	30"	24"	18"	Outrigger Length (ft.)
750	40 24 22	33 21 19	29 19 17	25 16 15	21 14 13	18 12 11	15 10 9	12 8 8	9 7 6	7 5 5	16' 22' 25'
1000	Not Allowed	44 28 25	38 25 22	33 21 19	28 19 17	24 16 14	20 13 12	16 11 10	12 9 8	9 6 6	16' 22' 25'
1250	Not Allowed	Not Allowed	Not Allowed	41 27 24	35 23 21	29 20 18	24 17 15	20 14 12	15 11 10	11 8 7	16' 22' 25'
1500	Not Allowed	Not Allowed	Not Allowed	Not Allowed	42 28 25	35 24 21	29 20 18	23 16 15	18 13 12	13 9 9	16' 22' 25'

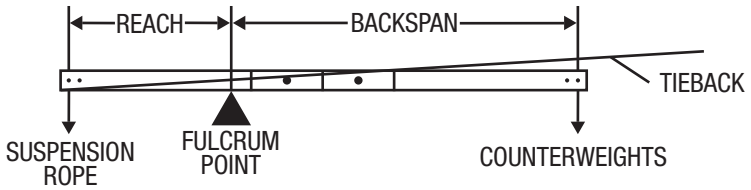
Number of 50 lb. Counterweights

Fulcrum Point Load Chart

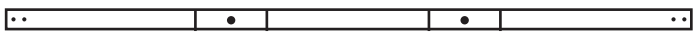
Reach (in.)

Hoist Rated Load (lb)	74"	66"	60"	54"	48"	42"	36"	30"	24"	18"	Outrigger Length (ft.)
750	5000	4650	4450	4250	4050	3900	3750	3600	3450	3350	16'
	4200	4050	3950	3800	3700	3600	3500	3400	3350	3250	22'
	4100	3950	3850	3750	3650	3550	3450	3400	3300	3250	25'
1000	Not Allowed	6200	5900	5650	5400	5200	5000	4800	4600	4450	16'
		5400	5250	5050	4950	4800	4650	4550	4450	4300	22'
		5250	5100	4950	4850	4700	4600	4500	4400	4300	25'
1250	Not Allowed	Not Allowed	Not Allowed	7050	6750	6450	6200	6000	5750	5550	16'
				6350	6150	6000	5850	5700	5550	5400	22'
				6200	6050	5900	5750	5600	5500	5350	25'
1500	Not Allowed	Not Allowed	Not Allowed	Not Allowed	8100	7750	7450	7150	6900	6650	16'
					7400	7200	7000	6800	6650	6450	22'
					7250	7050	6900	6750	6600	6450	25'

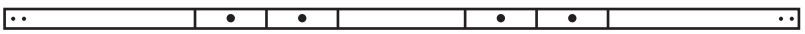
Fulcrum point loads are divided by 2 when 701960-1 or 701960-2 are used with 8-0217 series beams.



16' Outrigger: 8-0217-6



22' Outrigger: 8-0217-7



25' Outrigger: 8-0217-5

704241-1 & -2

5x5 Max Reach Assembly

Outrigger Counterweight Chart

Hoist Rated Load (lb)	Reach (in.) 96”	90”	84”	80”	76”	72”	66”	64”	60”	54”
1000	39	35	32	30	28	26				
1250	Not Allowed	Not Allowed	Not Allowed	Not Allowed	35	33	29	28	26	
1500	Not Allowed	Not Allowed	Not Allowed	Not Allowed	Not Allowed	Not Allowed	Not Allowed	34	31	27

Fulcrum Point Load Chart

Hoist Rated Load (lb)	Reach (in.) 96”	90”	84”	80”	76”	72”	66”	64”	60”	54”
1000	5950	5750	5600	5600	5500	5400				
1250	Not Allowed	Not Allowed	Not Allowed	Not Allowed	6750	6650	6450	6400	6300	
1500	Not Allowed	Not Allowed	Not Allowed	Not Allowed	Not Allowed	Not Allowed	Not Allowed	7700	7550	7350

700809-1

6 in. square tube, ¼ in. wall outrigger beam

Outrigger Counterweight Chart

Reach (in.)

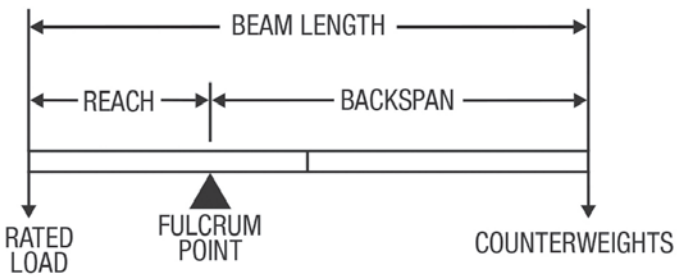
Rated Load (lb)	84”	78”	72”	66”	60”	54”
1000	33	31	27	24	22	19
1250	Not Allowed	Not Allowed	34	30	27	24
1500	Not Allowed	Not Allowed	Not Allowed	Not Allowed	32	28
	204”	210”	216”	222”	228”	234”

Minimum Backspan (in.)

Fulcrum Point Load Chart

Reach (in.)

Hoist Rated Load (lb)	84”	78”	72”	66”	60”	54”
1000	5650	5550	5350	5200	5100	4950
1250	Not Allowed	Not Allowed	6700	6500	6350	6200
1500	Not Allowed	Not Allowed	Not Allowed	Not Allowed	7600	7400



Maximum Reach	Hoist Load
84 in. (2.1 m)	1000 lb (453.6 kg)
72 in. (1.8 m)	1250 lb (567 kg)
60 in. (1.5 m)	1500 lb (680.4 kg)

700819-1

6 in. square tube, 1/2 in. wall outrigger beam

Outrigger Counterweight Chart

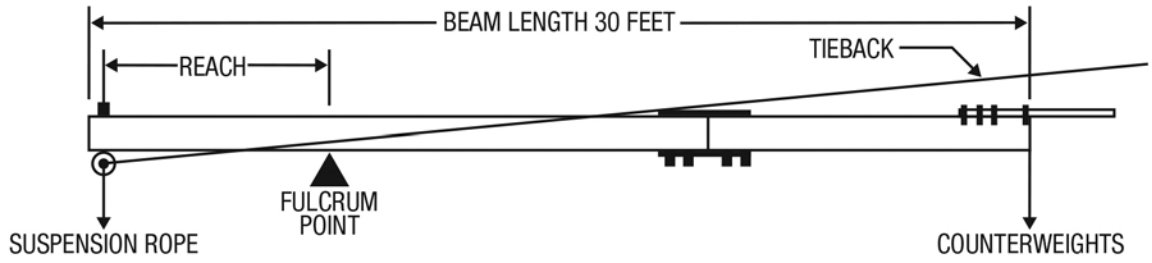
Reach (in.)

Hoist Rated Load (lb)	135”	132”	126”	120”	114”	108”	102”	96”	90”	84”	78”	72”	66”	60”
1000	49	47	44	41	38	35	32	30	27	25	23	21	19	17
1250	Not Allowed	Not Allowed	Not Allowed	Not Allowed	47	44	40	37	34	31	28	26	23	21
1500	Not Allowed	Not Allowed	Not Allowed	Not Allowed	Not Allowed	Not Allowed	48	44	41	37	34	31	28	25

Fulcrum Point Load Chart

Reach (in.)

Hoist Rated Load (lb)	135”	132”	126”	120”	114”	108”	102”	96”	90”	84”	78”	72”	66”	60”
1000	6450	6350	6200	6050	5900	5750	5600	5500	5350	5250	5150	5050	4950	4850
1250	Not Allowed	Not Allowed	Not Allowed	Not Allowed	7350	7200	7000	6850	6700	6550	6400	6300	6150	6050
1500	Not Allowed	Not Allowed	Not Allowed	Not Allowed	Not Allowed	Not Allowed	8400	8200	8050	7850	7700	7550	7400	7250



MAX NUMBER OF WEIGHTS FOR SPACE AVAILABLE:

1” THICK WEIGHTS – 41

7/8” THICK WEIGHTS – 44

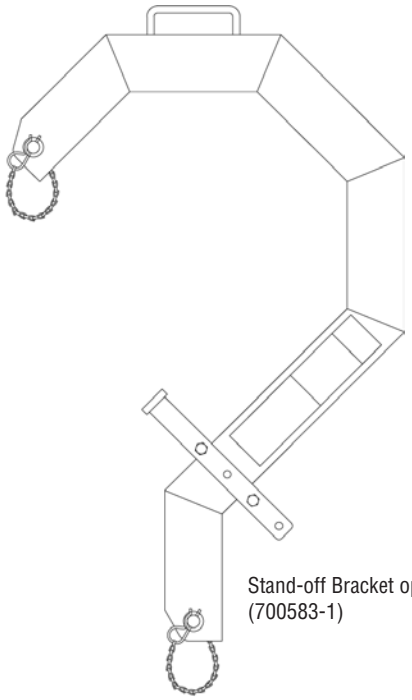
3/4” THICK WEIGHTS – 49

Maximum Reach	Hoist Load
135 in. (3.42 m)	1000 lb (453.6 kg)
114 in. (2.90 m)	1250 lb (567 kg)
102 in. (2.61 m)	1500 lb (680.4 kg)

Hooks & Clamps

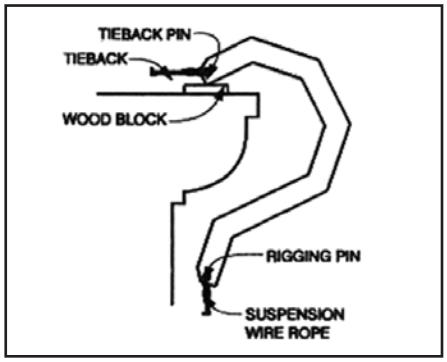
Cornice Hook (700558-12-1 & 700558-21-1)

- Structurally designed for point loading applications
- Extensive product labels make set-up goof-proof
- Can also be mounted on a parapet wall
- Built by Spider in the USA



Stand-off Bracket optional (700583-1)

Specifications:	700558-12-1 & 700558-21-1
Load/Capacity:	1,250 lb (567 kg) point loaded 1,500 lb (680.4 kg) parapet loaded
Weight: 700558-12-1 700558-21-1	 30 lb (13.6 kg) 46 lb (20.8 kg)
Wall Thickness: 700558-12-1 700558-21-1	 12 in. (305 mm) maximum 21 in. (533 mm) maximum
Optional: 700583-1	 Stand-off used to thrust out from wall in five adjustable positions from 2 1/8 in. to 9 1/8 in. (55 to 233 mm) at 1 3/4 in. (44 mm) increments; Actual thrust out depends on where bracket is clamped to hook

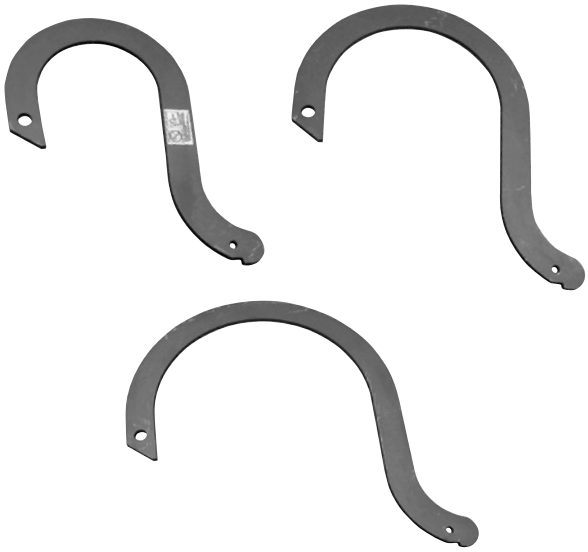


Point loaded application

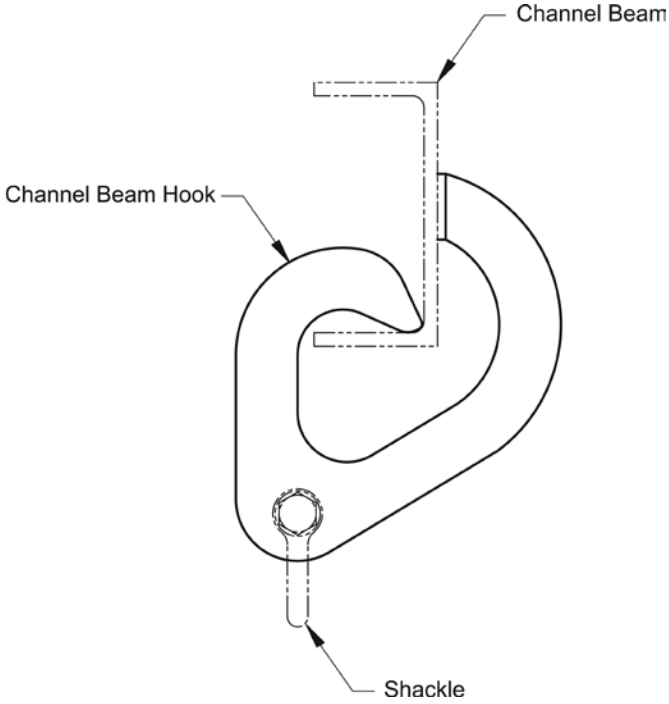
Call or click for more information
1-877-774-3370
www.spiderstaging.com

Parapet Hooks (700770-1, 700772-1, 700773-1)

- For parapet loading only
- Steel construction 13, 20 and 27 in. (330, 508 and 686 mm) throat openings
- Made in USA



Specifications:	**700770-1, 700772-1, 700773-1**
Load/Capacity:	1,500 lb (680.4 kg)
Weight:	
700770-1	35 lb (15.9 kg)
700772-1	44 lb (20 kg)
700773-1	50 lb (22.7 kg)
Max. Parapet Thickness:	
700770-1	12 in. (305 mm) maximum
700772-1	13-19 in. (330-483 mm)
700773-1	20-26 in. (508-660 mm)
Optional:	
SA-1089	Stand-off Bracket used with all three parapet hooks listed above; allows thrust out from wall in 4 5/8 in. and 7 3/4 in. (117 and 197 mm) adjustment positions; Actual thrust out depends on where bracket is attached to hook



Channel Beam Hook (SA-1579)

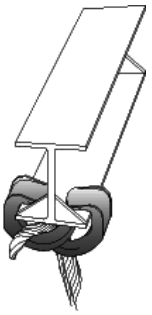
- Steel construction
- Designed for use on a structural channel section with depths from 6-15 in. (152-381 mm)
- Use only on a level beam or channel that has the web set vertically.
- Built by Spider in the USA

Specifications:	**SA-1579**
Load/Capacity:	1,000 lb (453.6 kg)

Hooks & Clamps (Continued)

Rigging Hook (SA-3205 & SA-1073)

- Steel construction
- Designed for structural steel applications, particularly for I- and H-beams in combination with an 18 in. (457 mm) eye splice for limited industrial applications.
- Used in horizontal transfer applications
- Contact your Spider professional for more information
- Made in USA



Use fist grips to secure this device during unloading

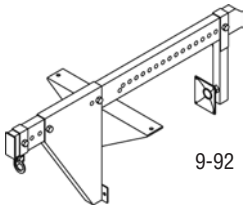
Specifications:	SA-3205 & SA-1073
Load/Capacity:	Maximum 1,500 lb (680.4 kg)
Use: SA-3205 SA-1073	 with flanges wider than 6 in. (152 mm) with flanges wider than 4 in. (102 mm)

Parapet Clamp (9-92 & 8-0044)

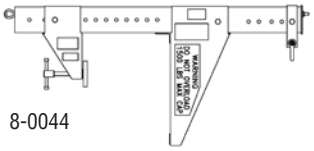
- Designed for maximum versatility–multiple throat openings fit different parapet widths
- Time-tested durable design
- Extensive product labels make set-up goof-proof
- Built by Spider in the USA

Extended Parapet Clamp (702396-1)

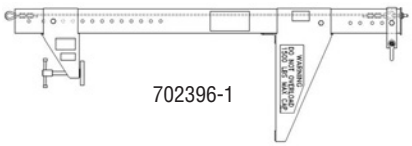
- Allows for parapet clamp use on parapet walls up to 44 in. (1,118 mm) thick. New labeling allows for use of a parapet clamp as a tieback anchorage when roof conditions provide no anchorage point.
- Heavy duty steel and aluminum alloy construction
- No tools required for installation
- Thorough labeling ensures worry-free installation
- Use beam portion 702606-1 with existing 8-0044 front and rear assemblies to modify parapet clamps in the field, allowing greater fleet flexibility
- Built by Spider in the USA



9-92



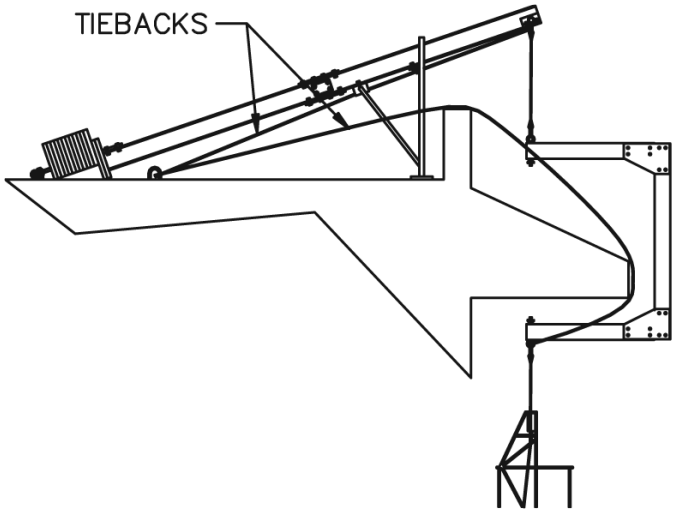
8-0044



702396-1

Part Number	9-92	8-0044	702396-1
Load/Capacity:	Maximum 1,000 lb (453.6 kg)	Maximum 1,500 lb (680.4 kg)	Maximum 1,500 lb (680.4 kg)
Length:	53.25 in. (1,353 mm)	59.5 in. (1,511 mm)	56 in. (1,422 mm)
Weight:	45 lb (20.4 kg)	52 lb (23.6 kg)	58 lb (26 kg)
Outreach:	Maximum reach: 20 in. (508 mm) with a 23 in. (584 mm) maximum throat opening	Maximum reach: 24 in. (610 mm)	Maximum reach: 24 in. (610 mm)
Maximum Throat Opening:	29 in. (737 mm) with a 17 in. (432 mm) outreach	20.88 in. (530 mm)	44 in. (1,118 mm) with a 24 in. (610 mm) outreach
Construction:	Aluminum	Steel & aluminum	Steel & aluminum

C-Beam Assembly (701135-1)

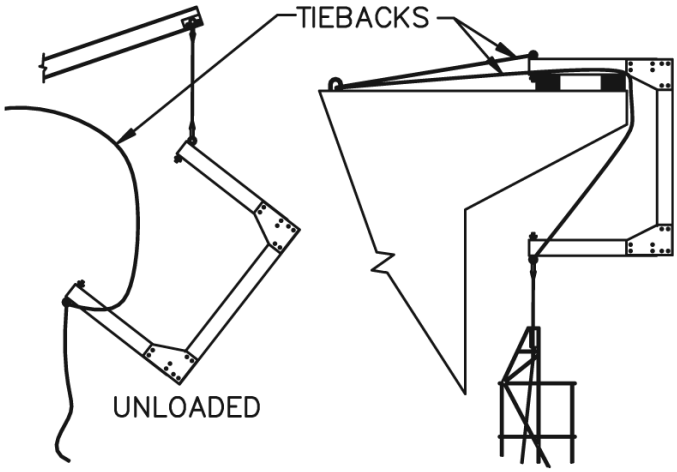


Suspended from outrigger beam

The C-beam allows rigging a suspension rope close to a building face below cornices and ledges. The C-beam can be used as a cornice hook, or it can be suspended from a standard outrigger beam with shackles, steel wire rope or turnbuckles.

Key Features:

- Versatile use with beam outrigger or same stand alone
- Made from heavy duty aluminum extrusion time-tested in our permanently installed davits
- Extensive product labels make proper installation goof-proof
- Built by Spider in the USA



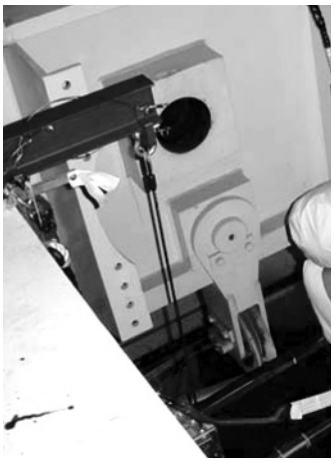
Cornice-mounted

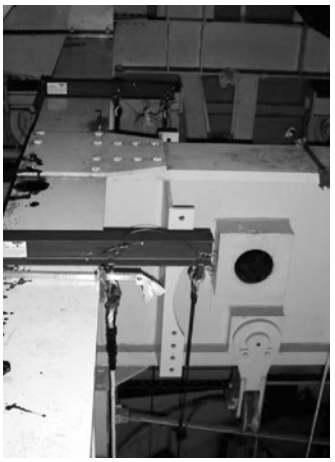
Specifications:	701135-1
Capacity:	1,500 lb (680.4 kg)
Height:	48 in. (1,219 mm) inside 67.5 in. (1,715 mm) outside
Weight:	134 lb (60.8 kg)
Horizontal Reach:	44 in. (1,118 mm) inside
Construction:	Aluminum extrusion and aluminum plate

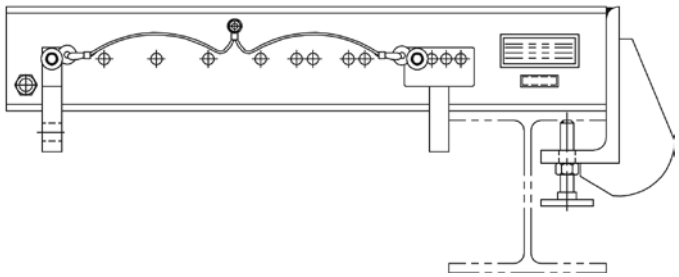
Additional rigging notes apply to this product.
Contact your Spider professional.

Call or click for more information
1-877-774-3370
www.spiderstaging.com

Truss Outriggers (SA-4474 & 5019-01)







The truss outriggers are designed for rigging on large, horizontal I-beam trusses or structural flanged beams.

They are especially useful when the suspension wire rope needs to be held a short distance away from the truss.

Fits beams with flange width of 6 in. (152 mm) or larger

Key Features:

- Heavy duty steel construction
- No tools installation
- Extensive labels make proper installation goof-proof
- Built by Spider in the USA

SA-4474

With a minimum I-beam size of 6 in. (152 mm), the maximum outreach measured from the outer edge of the I-beam is 15.2 in. (387 mm), and the minimum outreach with the 6 in. (152 mm) I-beam is 3 in. (76 mm). Theoretically, you can use this with I-beams up to 18 1/2 in. (470 mm) wide as long as the flange thickness is less than 1 1/2 in. (38 mm), which would give you an outreach measured from the outer edge of the I-beam of 2.7 in. (69 mm).

5019-01

With a minimum I-beam size of 6 5/8 in. (168 mm), the maximum outreach measured from the outer edge of the I-beam is 25 3/8 in. (645 mm), and the minimum outreach with the 6 5/8 in. (168 mm) I-beam is 16 3/8 in. (416 mm). The maximum I-beam width is 13 1/8 in. (333 mm) with a minimum outreach of 9 7/8 in. (251 mm) and a maximum outreach of 18 7/8 in. (479 mm) measured from the outer edge of the I-beam.

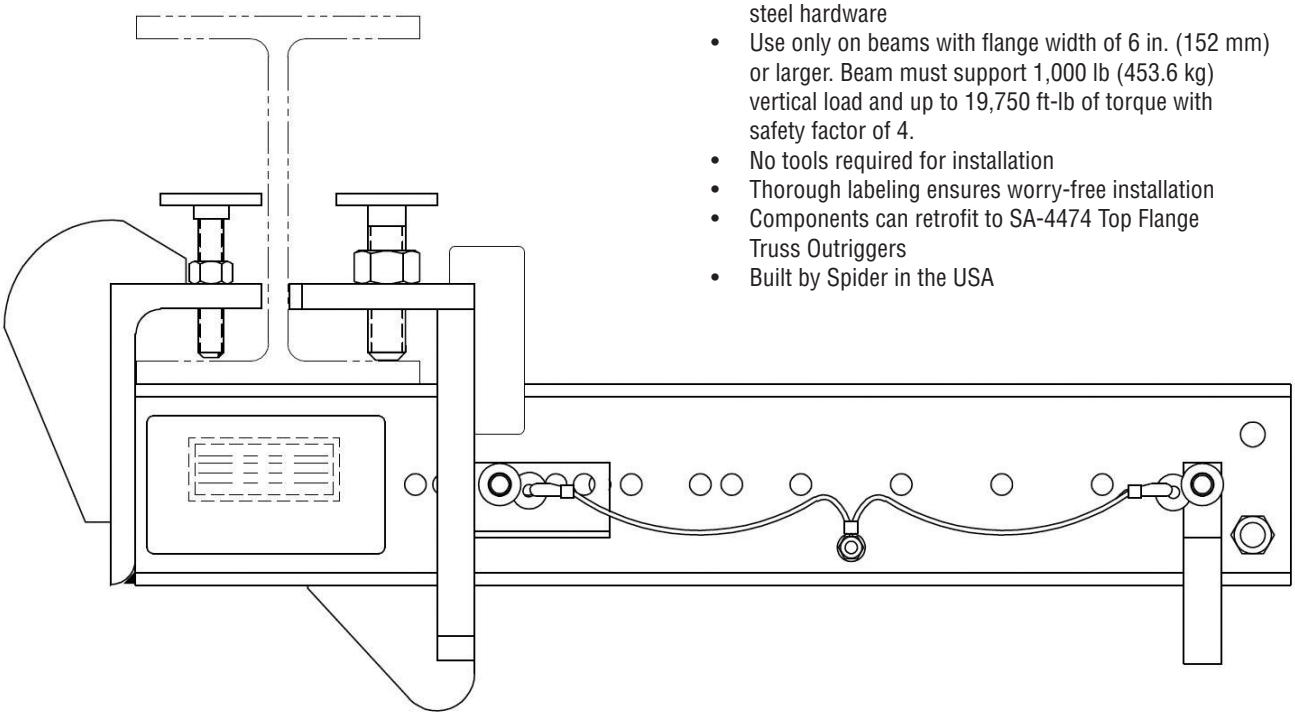
Part Number	SA-4474	5019-01
Load:	1,000 lb (453.6 kg)	1,500 lb (567 kg)
Weight:	28 lb (12.7 kg)	28 lb (12.7 kg)
Minimum Flange:	6 in. (152 mm)	6 5/8 in. (168 mm)
Maximum Flange:	12 in. (305 mm)	13 in. (330 mm)
Outreach:	Max: 15.2 in. (387 mm) at 6 in. flange size Min: 3 in. (76 mm) at 6 in. flange size	Max: 25 3/8 in. (658 mm) at 6 5/8 in. flange size Min: 16 3/8 in. (416 mm) at 6 5/8 in. flange size
Construction:	Steel	Aluminum

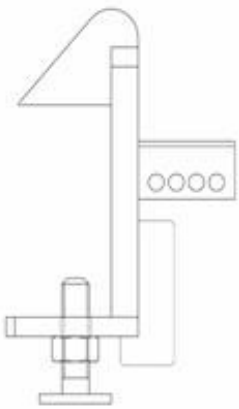
Bottom Flange Truss Outrigger (702554-1)

The Bottom Flange Truss Outrigger expands ability to mount to bottom flange of beams when unable to rig from the top flange.

Key Features:

- Heavy duty steel construction with stainless steel hardware
- Use only on beams with flange width of 6 in. (152 mm) or larger. Beam must support 1,000 lb (453.6 kg) vertical load and up to 19,750 ft-lb of torque with safety factor of 4.
- No tools required for installation
- Thorough labeling ensures worry-free installation
- Components can retrofit to SA-4474 Top Flange Truss Outriggers
- Built by Spider in the USA





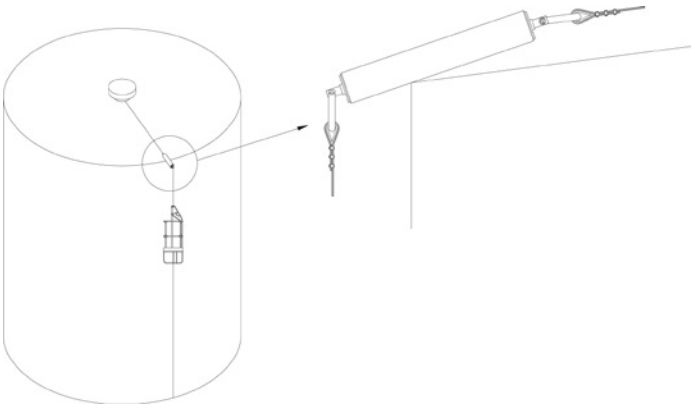
Want to retrofit an SA-4474? Order 702692-1 for bracket at left. See Service Instructions for details.

Specifications:	702554-1
Load Rating:	1,000 lb (453.6 kg)
Weight:	38 lb (17.2 kg)
Minimum Flange:	6 in. (152 mm) inside
Outreach:	3 in. (76 mm) minimum or 15.2 in. (386 mm) maximum at 6 in. (152 mm) flange size

Call or click for more information
1-877-774-3370
www.spiderstaging.com

Tank Top Roller–Pin Style (700525-1)

Steel roller with shackle for tieback and suspended load; Effective for rigid top petroleum and other storage tanks

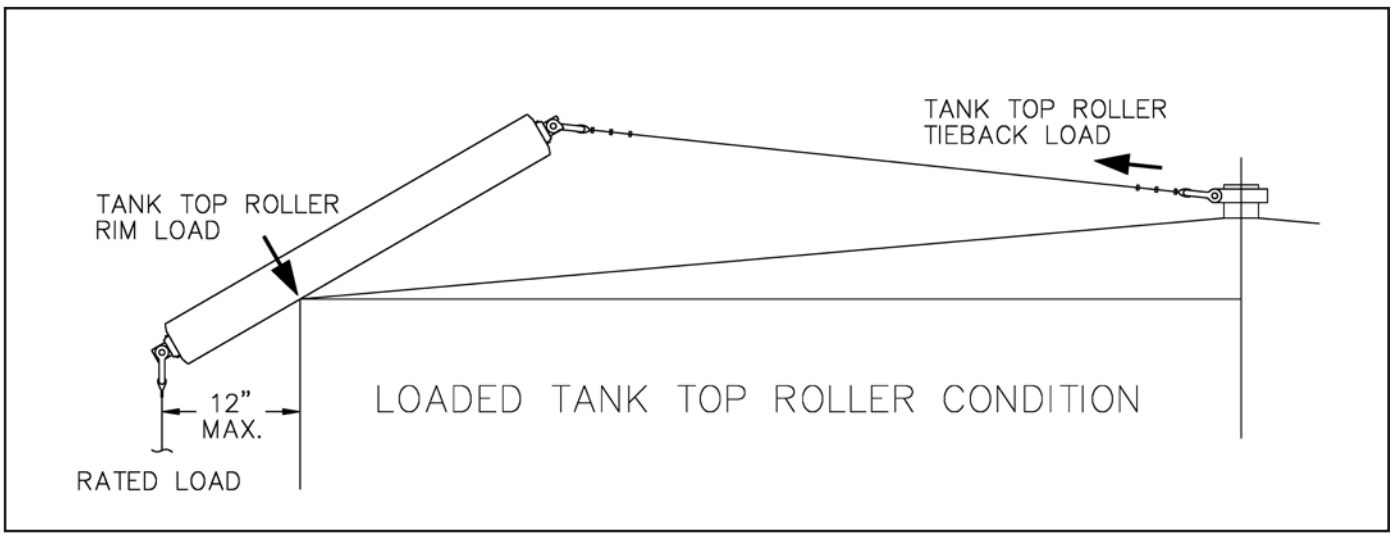


Key Features:

- Heavy duty steel construction
- Fully sealed bearing allows both shackles to pivot freely
- Pivoting shackles aid easy rolling
- Capped ends prevent entry of debris into shaft to prolong device life
- Sealed bearing makes rolling smooth and easy
- Sealed bearing does not require lubrication
- Designed for corrosive environments
- Extensive product labels make installation goof-proof
- Built by Spider in the USA

Specifications:	700525-1
Load/Capacity:	Maximum 1,500 lb (680.4 kg)
Dimensions:	41 in. (1,041 mm) long x 4 in. (102 mm) o.d.
Weight:	46 lb (20.9 kg)
Outreach:	12 in. (304 mm) from edge of tank
Construction:	Steel

Protect your Investment!
Use hoist covers on page 135.



Ring Girder Rollers (4963-01, -02, -03)

Steel construction with wheel as shown below, shackle for tieback and suspended load; For use on floating top petroleum and chemical storage tanks

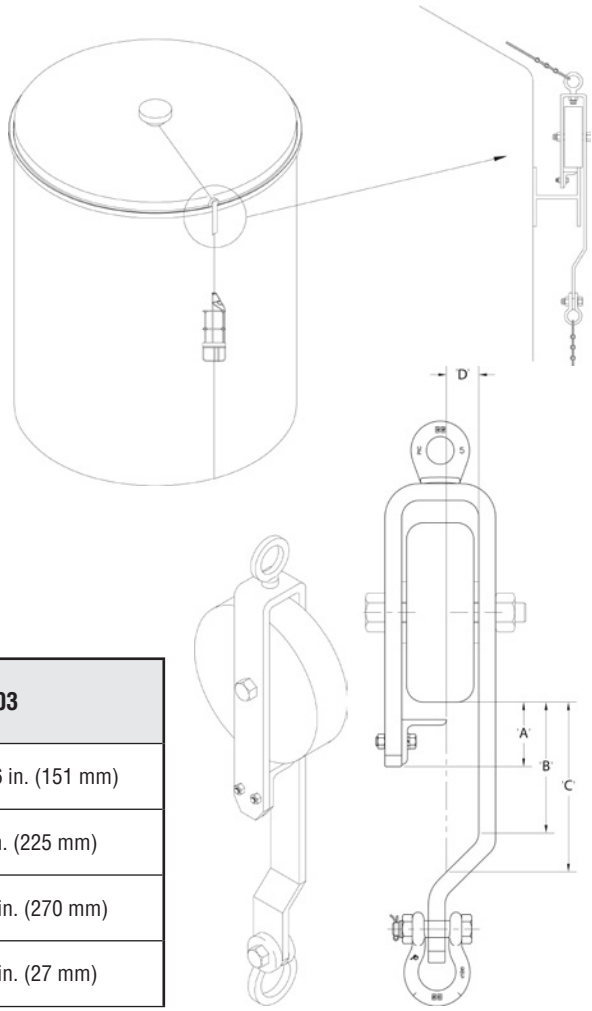
Key Features:

- Heavy duty steel construction
- Choices of wheel size and material to meet site needs
- Built by Spider in the USA

4963-01 features an 8 in. O.D. x 3 in. (203 x 76 mm) polyurethane wheel with bushings for easy transfer along girder.

4963-02 features a 3 1/2 in. O.D. x 3 1/4 in. (89 x 83 mm) non-marking plastic wheel.

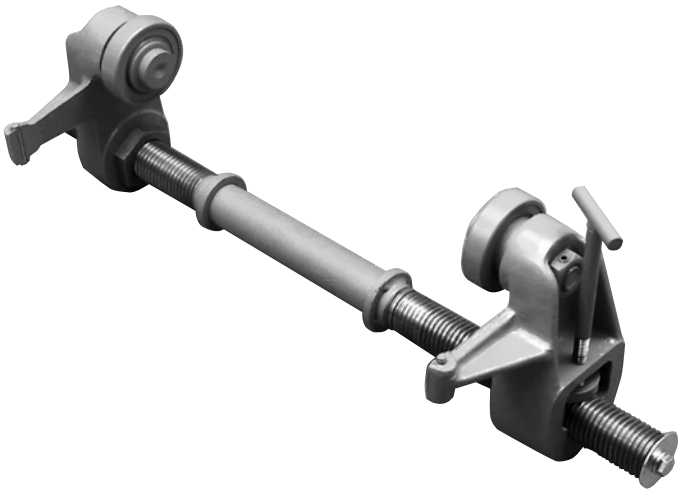
4963-03 features a steel wheel and is used when height between roller and eyebolt is critical. 2 in. (51 mm) wheel with 1 in. (25 mm) flanges keeps the roller tracking on the girder.



	4963-01	4963-02	4963-03
A	2 7/8 in. (73 mm)	5 1/8 in. (130 mm)	5 15/16 in. (151 mm)
B	5 13/16 in. (148 mm)	8 1/16 in. (205 mm)	8 7/8 in. (225 mm)
C	7 9/16 in. (192 mm)	9 13/16 in. (249 mm)	10 5/8 in. (270 mm)
D	1 7/16 in. (37 mm)	1 7/16 in. (37 mm)	1 1/16 in. (27 mm)

Specifications:	4963-01	4963-02	4963-03
Load/Capacity:	1,000 lb (453.6 kg)	1,000 lb (453.6 kg)	1,000 lb (453.6 kg)
Wheel Dimensions:	8 in. (203 mm)	3 1/2 in. (89 mm)	2 in. (51 mm)
Weight:	30.5 lb (13.9 kg)	25.5 lb (11.6 kg)	25.5 lb (11.6 kg)
Frame:	25.3 x 2.5 x 7 in. (643 x 64 x 178 mm)	25.3 x 2.5 x 7 in. (643 x 64 x 178 mm)	25.3 x 2.5 x 7 in. (643 x 64 x 178 mm)
Construction:	Steel w/ polyurethane wheel	Steel w/ plastic wheel	Steel w/ steel wheel

I-Beam Roller (SA-1003 & SA-1003-22)



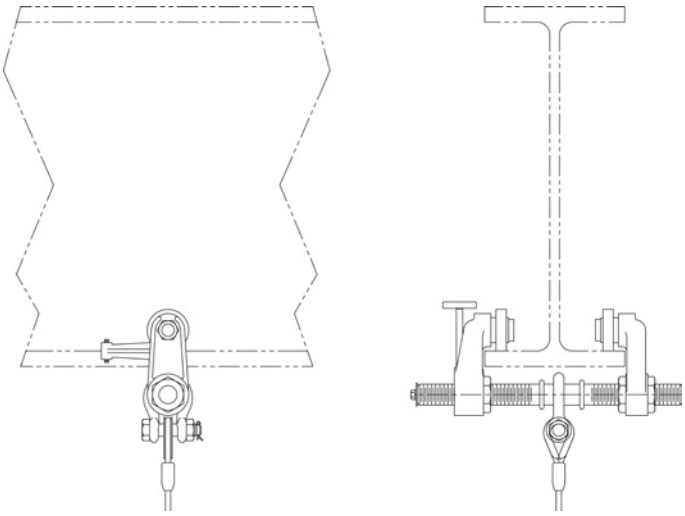
- Designed to work on a horizontal I-beam
- SA-1003 fits flanges 4-10 in. (102-254 mm) wide
- SA-1003-22 fits flanges up to 16 in. (406 mm) wide and 1 3/8 in. (35 mm) thick
- SA-1003-1 Thick Flange Adapter Bracket adapts either beam roller to flanges up to 2 1/4 in. (70 mm) thick. Order two for each SA-1003 roller.

Key Features:

- Heavy duty steel construction
- Time-tested design
- No tools required for installation
- Built by Spider in the USA

Notes for use:

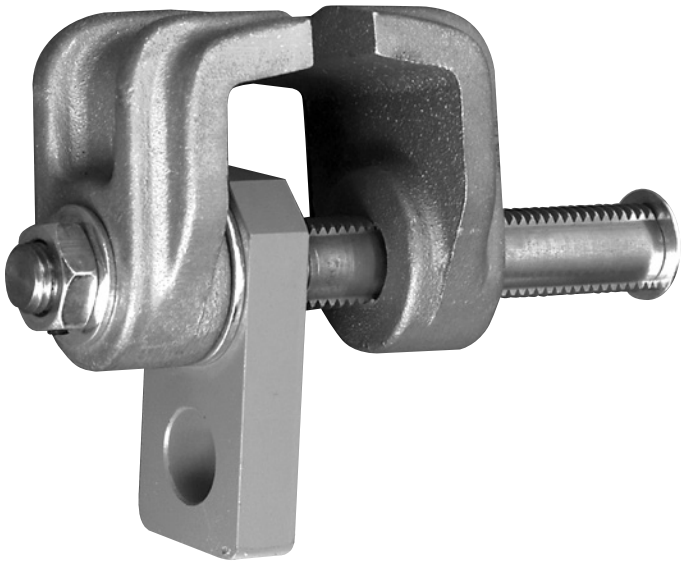
- The beam width needs to be known in advance, as the flange width is needed to determine the location of the fixed roller.
- The beam flange should be a consistent width, with no cutouts or notches that would allow the roller to roll off.
- Block or clamp the end of the beam to keep the roller from rolling off using 702067-1 end stop.
- The beam must be level, as rollers do not have a brake.

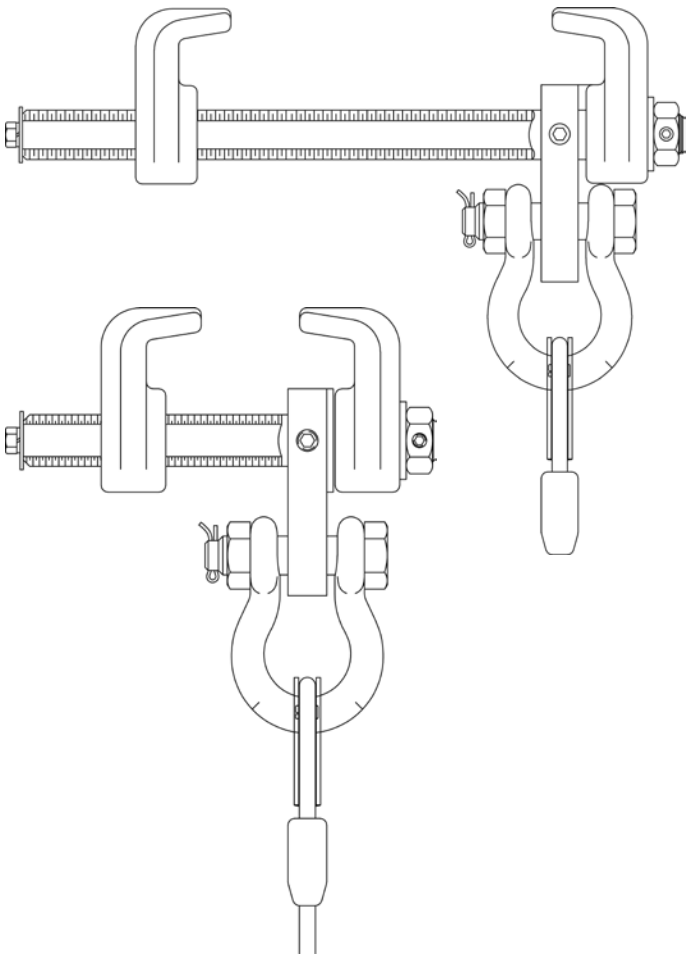


Specifications:	SA-1003	SA-1003-22
Load/Capacity:	1,500 lb (680.4 kg)	1,500 lb (680.4 kg)
Weight:	10.9 lb (4.9 kg)	13 lb (5.9 kg)
Used With:	Flanges 4-10 in. (102-254 mm wide)	Flanges up to 16 in. wide and 1 3/8 in. (35 mm) thick
Construction:	Aluminum	Aluminum

702067-1 End Stop

Adjustable I-Beam Clamp (SA-1039 & SA-1040)





Self-locking steel clamp fits I-beam flanges:

SA-1039 fits 1 1/2 to 4 in. (38 to 101 mm) wide
SA-1040 fits 1 1/2 to 8 in. (38 to 203 mm) wide

Key Features:

- Heavy duty steel construction
- Time-tested design
- No tools required for installation
- Built by Spider in the USA

Specifications:	**SA-1039 & SA-1040**
Capacity:	1,500 lb (680.4 kg)
Weight:	SA-1039: 7 lb (3.2 kg) SA-1040: 8 lb (3.6 kg)

Notes for use:

- These I-beam clamps are intended to be used on the bottom flange of a horizontal I-beam or structural T.
- The flange should not be narrower than 1 1/2 in. (38 mm) and not wider than 4 in. (102 mm) for the SA-1039, or 8 in. (203 mm) for the SA-1040.
- The beam must be able to sustain the maximum rated working load with a safety factor of 4:1.
- Do not use these devices on a vertical beam or in a way that would place the suspension wire rope parallel to the beam.

Frequently used accessory:

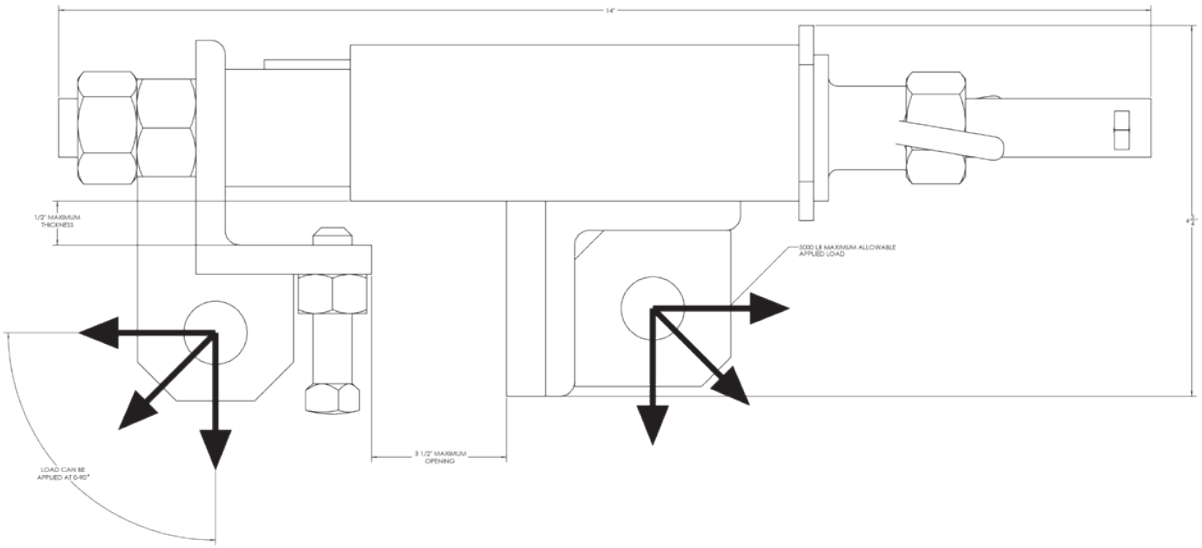
See page 125 for SA-1002 Transfer chain.

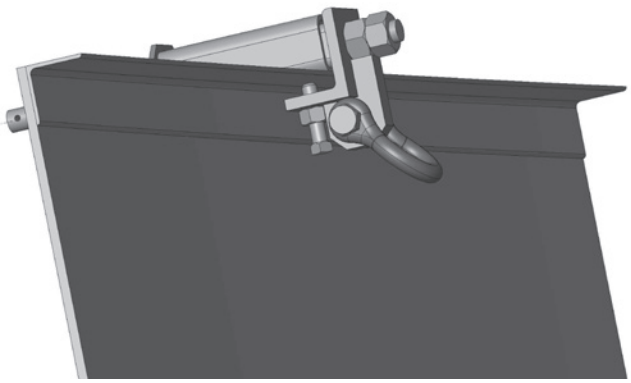
Adjustable Tank Edge Clamp (705771-1)

Designed for equipment tie-back or fall arrest anchorage. Reach is not designed for use as an equipment rigging device.

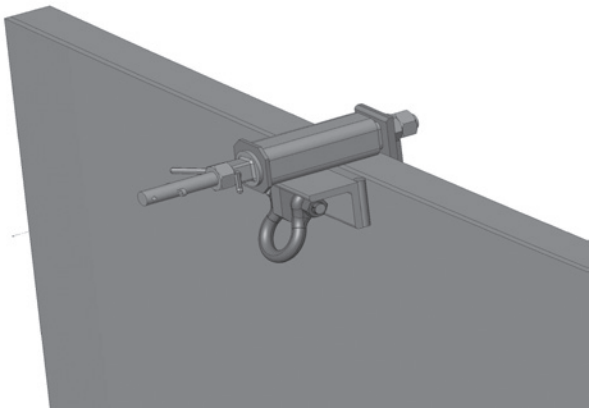
- Adjustable for different size tank walls
- Easily mountable
- Two rigging holes so mounting can occur inside or outside a tank, depending on the wall's construction
- Lightweight design
- Rugged, durable construction
- Made by Spider in the USA

Specifications:	705771-1
Max Capacity:	5,000 lb (2,268 kg)
Max. personnel weight for fall arrest:	310 lb max (140.6 kg)
Max angle thickness:	0.5 in. (13 mm)
Max angle leg length plus tank wall thickness:	3.5 in. (89 mm)





Rear View



Front View

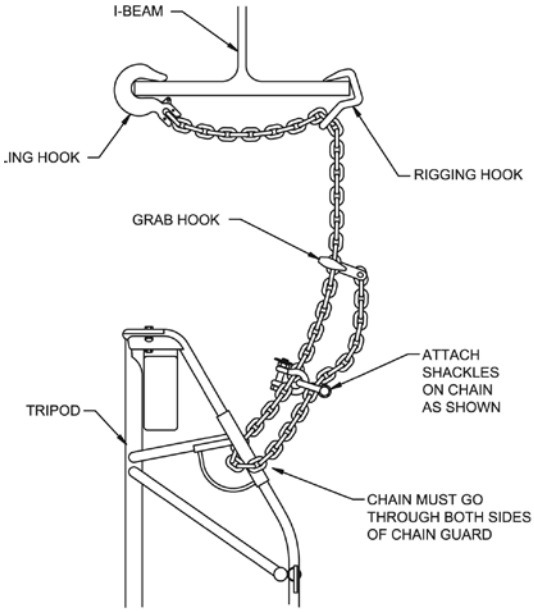
Transfer Chains (SA-1002)

Rugged steel rigging hooks and high quality steel chain expedite horizontal travel through structural steel safely and efficiently.

- Transfer chains allow for 'walking' the rigging point by transferring weight back and forth from transfer chain to rigging point to move along a structural beam and around vertical obstacles without lowering the stage to the ground.
- Makes it possible to transfer from the rigging point to transfer chain, to allow repositioning of the rigging point and reloading the suspension wire rope
- Eliminates need to lower stage to ground to move rigging point

Key Features:

- Allows up to 24 in. (610 mm) horizontal travel
- Stamped metal tag shows load, reach and serial number
- Serialized for asset tracking
- Made by Spider in the USA



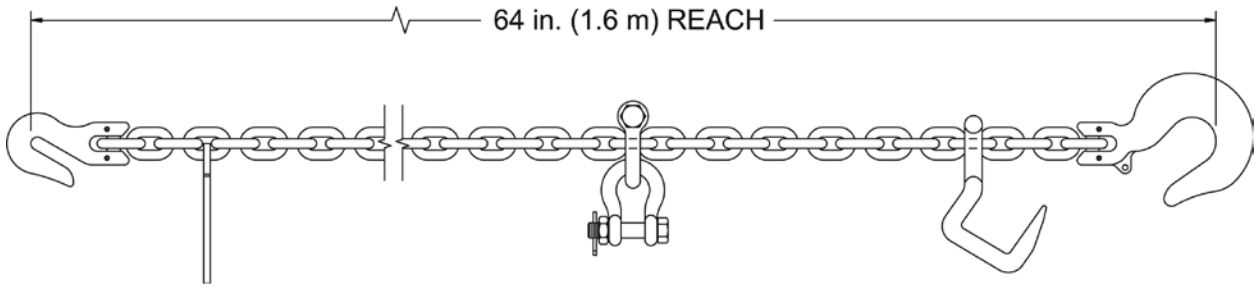
USAGE VIEW

Used with:

All drum hoists
701086-1 Steel Work Cage
700903-1 Collapsible Aluminum Work Cage
701200-1 Low Profile Stirrup

Additional Operating Instructions explaining proper use of this device are available. Contact your Spider professional. To achieve horizontal travel with other Spider devices, contact your Spider professional.

Specifications:	SA-1002
Load Capacity:	1,500 lb (680.4 kg)
Weight:	8 lb (3.6 kg)
Construction:	Forged steel hooks and steel chain



Accessories

Part Number:	Description:	Used With:	Specifications:
233740	Fist Grip 5/16 in. (8 mm)	Beams, parapet and cornice hooks/clamps, 700525-1 and 4963-XX	Designed for attaching safety tieback lines, but not recommended for use on the suspension wire rope
233745	Fist Grip 3/8 in. (10 mm)	Beams, parapet and cornice hooks/clamps, 700525-1 and Spider Modular Platform	Designed for attaching safety tieback lines, but not recommended for use on the suspension wire rope
557026	5/8 in. (16 mm) Bolt Type Anchor Shackle	Rigging	Attaches the suspension wire rope eye to the rigging device when the rigging device does not provide for ready attachment
A-11835	Caster; 12 in. (305 mm)	For rolling towers	1 3/8 in. (35 mm) stem; max. load 1,200 lb (545 kg)
A-11934	Caster 8 in. (20 mm)	For rolling towers	1 3/8 in. (35 mm) stem; max. load 750 lb (341 kg)

BD-00019

Designed for a variety of applications, including:

- Anchoring scaffolding to secure structures
- Material handling and lifting
- Demolition

A 2,000 lb. (907.2 kg) maximum safe working load is established by drilling a 1 in. (25 mm) diameter hole in cured concrete and inserting the Spider anchor.

This unit is NOT designed for fall protection use. See models BD-00009 and BD-00018 on page 160 for fall protection applications.

Wire Rope Assemblies

Part Number -xxx denotes length i.e. 1329-175 and 4405-550	Lengths Available	Termination Rigging Point	Termination Bitter End
700939-xxx	100 to 500 ft (30.5 to 152.4 m) in 25 ft (7.6 m) increments; 550 ft (167.6 m) and above in 50 ft (15.2 m) increments	Flemish Eye Splice with Steel Swaged Sleeve and Galvanized Thimble	Tapered Brazed Bullet
701450-xxx	100 to 500 ft (30.5 to 152.4 m) in 25 ft (7.6 m) increments; 550 ft (167.6 m) and above in 50 ft (15.2 m) increments	Flemish Eye Splice with Steel Swaged Sleeve and Galvanized Thimble	Tapered Brazed Bullet
701354-xxx	100 to 500 ft (30.5 to 152.4 m) in 25 ft (7.6 m) increments; 550 ft (167.6 m) and above in 50 ft (15.2 m) increments	Nicropress Oval Sleeves and Galvanized Thimble	Tapered Brazed Bullet
700018-xxx	100 to 500 ft (30.5 to 152.4 m) in 25 ft (7.6 m) increments; 550 ft (167.6 m) and above in 50 ft (15.2 m) increments	Flemish Eye Splice with Steel Swaged Sleeve and Galvanized Thimble	Tapered Brazed Bullet
701478-xxx	100 to 500 ft (30.5 to 152.4 m) in 25 ft (7.6 m) increments; 550 ft (167.6 m) and above in 50 ft (15.2 m) increments	Flemish Eye Splice with Steel Swaged Sleeve and Galvanized Thimble	Tapered Brazed Bullet
1329-xxx*	100 to 500 ft (30.5 to 152.4 m) in 25 ft (7.6 m) increments; 550 ft (167.6 m) and above in 50 ft (15.2 m) increments	Flemish Eye Splice with Steel Swaged Sleeve and Galvanized Thimble	Swaged, Forged Cable Drum Hook
701990-xxx	100 to 500 ft (30.5 to 152.4 m) in 25 ft (7.6 m) increments; 550 ft (167.6 m) and above in 50 ft (15.2 m) increments	18 in. Flemished Eye Splice with Steel Swaged Sleeve; Slip On Thimble	Swaged, Forged Cable Drum Hook
4405-xxx	100 to 500 ft (30.5 to 152.4 m) in 25 ft (7.6 m) increments; 550 ft (167.6 m) and above in 50 ft (15.2 m) increments	Flemish Eye Splice with Steel Swaged Sleeve and Galvanized Thimble	Swaged, Forged Cable Drum Hook
701447-xxx	100 to 500 ft (30.5 to 152.4 m) in 25 ft (7.6 m) increments; 550 ft (167.6 m) and above in 50 ft (15.2 m) increments	Flemish Eye Splice with Steel Swaged Sleeve and Galvanized Thimble	Swaged, Forged Cable Drum Hook
701353-xxx	100 to 500 ft (30.5 to 152.4 m) in 25 ft (7.6 m) increments; 550 ft (167.6 m) and above in 50 ft (15.2 m) increments	Nicropress Oval Sleeves and Galvanized Thimble	Swaged, Forged Cable Drum Hook
4863-xxx	200 to 750 ft (61 to 228.6 m) in 50 ft (15.2 m) increments	Flemish Eye Splice with Steel Swaged Sleeve and Galvanized Thimble	Swaged, Forged Cable Drum Hook
4775-xxx	100 to 500 ft (30.5 to 152.4 m) in 25 ft (7.6 m) increments; 550 ft (167.6 m) and above in 50 ft (15.2 m) increments	Flemish Eye Splice with Steel Swaged Sleeve and Galvanized Thimble	Swaged, Forged Cable Drum Hook

For Insulated Wire Rope Assemblies, see part numbers 701108-xxx and 701118-xxx in Wire Rope Insulation & Welding on page 135.
*1329-xxx is available with eye splice or swaged terminations. Consult your Spider professional to order the appropriate assemblies.

Construction	Min. Breaking Strength in lb (kg)	Weight/100 ft lb (kg)	Used with Traction Hoists: SC40/30, SC1000/1500, ZMAC/1000®	Used with Drum Hoists: ST-17, ST-180, ST-19 ST-26, LSR1
5/16 in. 5 x 26 WSRR XXIP Galvanized; Fiber Core	11,500 (5,216.3)	16 (7.3)	✔	
8.4 mm 5 x 26 WSR HDPP core Galvanized	11,570 (5,248)	19 (8.6)	✔	
8.4 mm 5 x 26 WSR HDPP core Galvanized 5/16 in 5 x 26 WSRR XXIP Galvanized; Fiber Core	11,570 (5,248) 11,500 (5,216.3)	19 (8.6) 16 (7.3)	✔	
8.4 mm 6 x 19 Seale XXIP IWRC	12,500 (5,669.9)	19 (8.6)	✔ PI Applications Only	
3/8 in. 6 x 19 Seale XIP IWRC	15,100 (6,849.2)	26 (11.8)	✔ PI Applications Only	
5/16 in. 5 x 26 WSRR XXIP Galvanized; Fiber Core	11,500 (5,216.3)	16 (7.3)		✔
5/16 in. 5 x 26 WSRR XXIP Galvanized; Fiber Core	11,500 (5,216.3)	16 (7.3)		✔
5/16 in. 6 x 19 EIP IWRC Galvanized	10,540 (4,780.9)	18 (8.2)		✔
8.4 mm 5 x 26 WSR HDPP core Galvanized	11,500 (5,216.3)	19 (8.6)		✔
8.4 mm 5 x 26 WSR HDPP core Galvanized 5/16 in 5 x 26 WSRR XXIP Galvanized; Fiber Core	11,570 (5,248) 11,500 (5,216.3)	19 (8.6) 16 (7.3)		✔
8.4 mm 6 x 19 Seale XXIP Preformed IWRC	12,500 (5,669.9)	19 (8.6)		✔ PI Applications Only
3/8 in. 6 x 19 Seale XIP IWRC	15,100 (6,849.2)	26 (11.8)		✔ PI Applications Only

Spider does not recommend Fist Grips for suspension wire rope terminations for general use due to manufacturer's more frequent inspection and specific torque requirements. Wire Rope Assembly specifications subject to change. Contact your Spider professional for additional information.

Crosby Terminator™ Wedge Socket (P-00146-1)

- Basket is cast steel
- Individually magnetic particle inspected
- Pin diameter and jaw opening allow wedge and socket to be used in conjunction with open swage and spelter sockets.
- Secures the tail or 'dead end' of the wire rope to the wedge, thus eliminating loss or 'punch out' of the wedge
- Eliminates the need for an extra piece of rope and is easily installed
- Eliminates the potential breaking off of the tail due to fatigue
- The tail, which is secured by the base of the clip and the wedge, is left undeformed and available for reuse.
- Incorporates Crosby's patented Quic-Check® "Go" and "No-Go" feature cast into the wedge. The proper size rope is determined when the following criteria are met:
  1. The wire rope should pass through the "Go" hole in the wedge.
  2. The wire rope should NOT pass through the "No Go" hole in the wedge.
- Utilizes standard Crosby Red-U-Bolt wire rope clip
- Generates a minimum efficiency of 80% based on the catalog breaking strength of the wire rope
- Standard wedge socket can be retrofitted with the new style Terminator wedge.
- Available with Bolt, Nut and Cotter Pin

Wire Rope		S-421T Stock No. Complete Assembly	S-421T Weight Each		S-421 TW Stock No. Wedge Only	S-421 TW Weight Each	
In.	mm.		lb	kg.		lb	kg.
3/8	10	1035000	3.2	1.4	1035555	0.5	0.2
1/2	13	1035009	6.2	2.8	1035564	1.1	0.5
5/8	16	1035018	9.7	4.4	1035573	1.8	0.8
3/4	19	1035027	14.5	6.6	1035582	2.6	1.2
7/8	22	1035036	21.5	9.8	1035591	4	1.8
1	25	1035045	30.8	13.9	1035600	5.4	2.4
1 1/8	29	1035054	45.3	20.5	1035609	7.8	3.6
** 1 1/4	32	1040448	57.5	26.1	1040607	6.8	3.1

** 1 1/4 in (32 mm) not available in Terminator™ style

Safety Line (704076-1)

Spider safety line has a stronger tensile strength and quick delivery at a great price

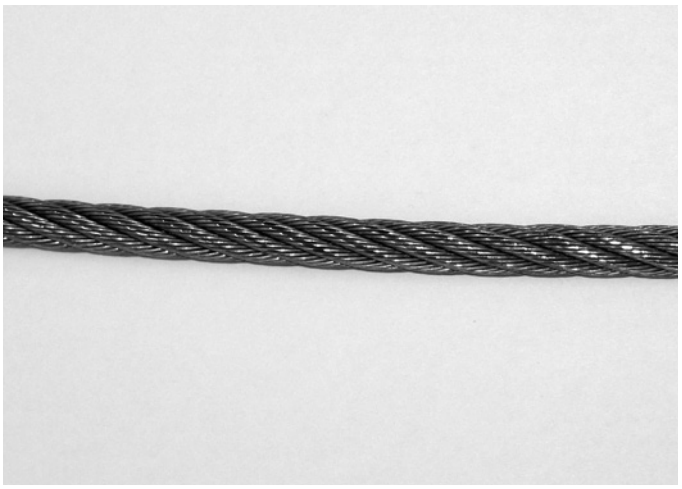
- Firmer lay creating more control
- Smoother trailing action for trailing rope grabs
- Hockle resistant construction
- Spider-logo'd tag on all lengths
- Availability of full reels for self-sizing ropes
- Spider black and red tracer
- Conforms to and tested to OSHA 1926.502(d)(9), ANSI Z359.1-2007
- Made by Spider in the USA

704076-1	5/8 in. (16 mm) vertical lifeline	per foot
704076-600	5/8 in. (16 mm) vertical lifeline	600 ft (182.9 m)
704076-1200	5/8 in. (16 mm) vertical lifeline	1,200 ft (365.8 m)
704076-2400	5/8 in. (16 mm) vertical lifeline	2,400 ft (731.5 m)

Strength:	5,600 lb (2,540.1 kg) minimum
Weight:	10.7 lb (4.9 kg) per 100 ft (30.5 m)
Material:	5/8 in. (16 mm) diameter three strand polyester/copolymer combo

Call or click for more information
1-877-774-3370
www.spiderstaging.com

Steel Wire Rope (702185-1)



- 5 x 26 Warrington Seale compacted construction with high-density polypropylene core
- Preformed, galvanized, right hand regular lay
- Supplied on 5,000 ft (1,524 m) one-way reels and custom cut to shorter lengths

Specifications:	**5/16 in. nominal (0.323 in. +/- 0.003 in. design)**
Weight:	171 lb/ft (255 g/m)
Minumum breaking strength:	11,500 lb (51 kN)

Wire Winder (9-98)

Specifications:	**9-98**
Capacity:	Will handle up to 600 ft (182.9 m) of 5/16 in. (8 mm) diameter wire rope or up to 500 ft (152.4 m) of 3/8 in. (10 mm) diameter wire rope
Weight:	32 lb (14.5 kg)
Dimensions: **Base Unit:**	9 3/4 x 24 1/2 x 12 1/4 in. (248 x 622 x 311 mm)
Cage Unit:	20 1/4 in. (514 mm) OD
Construction:	Steel

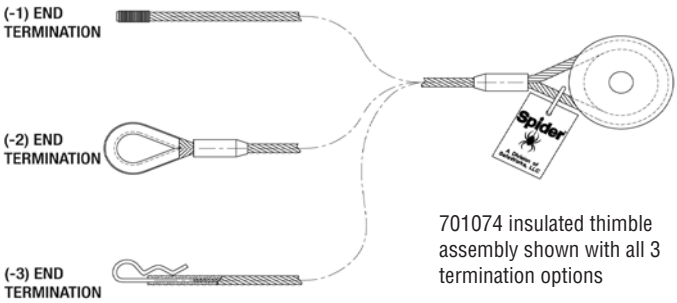
Key Features:

- Large storage capacity
- Compact and lightweight – fits on deck of any scaffold 24 in. (610 mm) or wider
- Easy to install and operate – optional adapter attaches to hoist exit guide and hoist automatically feeds wire rope into the rotating basket
- Rugged and maintenance free – all welded construction and entirely zinc plated for corrosion protection
- Eliminates the 'tail line' in the suspension wire ropes below the scaffold to prevent damage to the building or possible injury to pedestrians
- Prevents wire ropes from being blown into power lines on tight jobsites or being crushed or snagged by a vehicle
- Provides convenient, tangle-free storage of wire ropes between usage and prevents contamination by dirt to prolong rope life
- Greatly reduces line handling on 'roof rigged' jobs

Call or click for more information
1-877-774-3370
www.spiderstaging.com

Insulated Thimbles

For use in insulated thimble assemblies
Nylon insulated thimble; 5/16 in. (8 mm)
Complies with OSHA Standard 29 CFR 1926.451 (f) (17)



701074 insulated thimble assembly shown with all 3 termination options

Part Number	Description	Length
4897	Insulator Assy; Wire Rope	30 in. (762 mm)
701074-1	Insulated Thimble Assy; Seize End	30 ft (9.1 m)
701074-2	Insulated Thimble Assy; Thimble End	1.25 ft (0.38 m)
701074-3	Insulated Thimble Assy; Clip	30 ft (9.1 m)

701074-1 701074-2 701074-3

SC1000 and Zmac/1000® Arc Guard Kit (701301-2)

Also Available:
Traction Hoist Arc Guard Kit For SC30/SC40 (701301-1)

Wire Rope Insulator Assembly (4897)

Plastic dipped porcelain insulator assembly

Need help understanding the OSHA codes regarding welding from suspended platforms?

Request our flyers on welding by calling our professionals at 877-774-3370

Safety Welding Ground (701151-1)

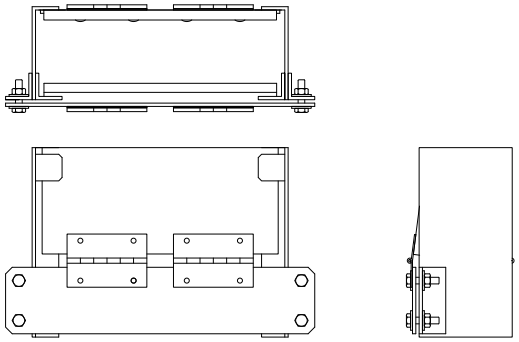
Provides additional ground between the suspended platform and the structure as required by OSHA for welding applications.
Specifically complies with OSHA Standard 29 CFR 1926.451 (f) (17)

- Large handle speeds magnet removal and relocation.
- Kellums grips prevent clamp from accidentally detaching from platform.
- Built by Spider in the USA

* Verify with carrier if this can be transported by air freight

Arc Guard Kits

Top Arc Guard 4485



Bottom Arc Guard 700947-1

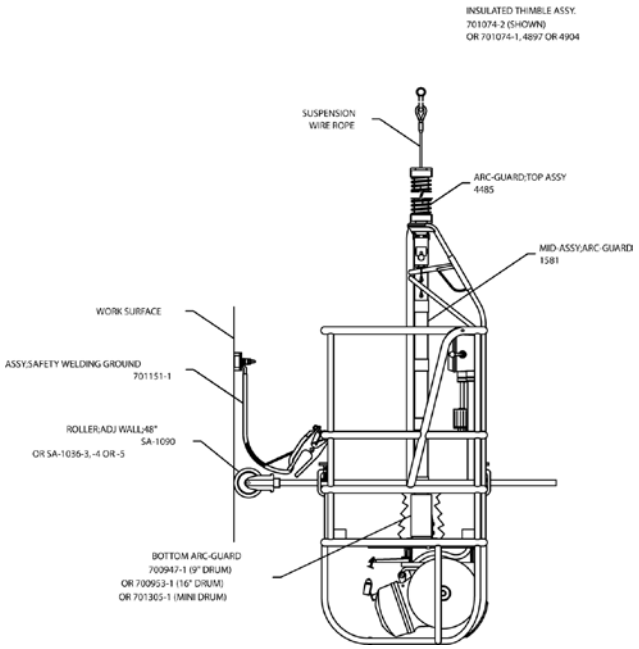
SA-1083-x: Kits include 4485 Top Assembly pictured at left, a 1581 Mid Assembly and a 700947-1 Bottom Arc Guard Assembly.

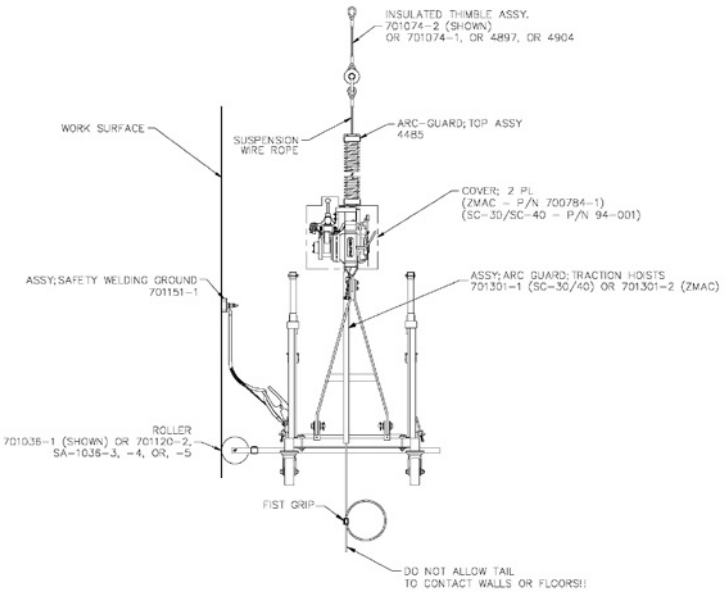
1581: Split tube assembly with Velcro closures to wrap around a wire rope

The top end of this assembly has two chains with hooks to attach to a hoist. This arc guard assembly can be used in the welding application to guard against contact from the hoist tail line and the platform.

Complies with OSHA Standard 29 CFR 1926.451 (f) (17)

SA-1083:	9 in. (229 mm) drum 500 ft (152 m) of wire rope
SA-1083-1000:	16 in. (406 mm) drum 1,000 ft (305 m) of wire rope
SA-1083-26:	For ST-26 Mini Drum 235 ft (71.6 m) of wire rope
Welding Arc Guard (4485):	top guard used with the SA-1083, SA-1083-1000 and SA-1083-26 kits

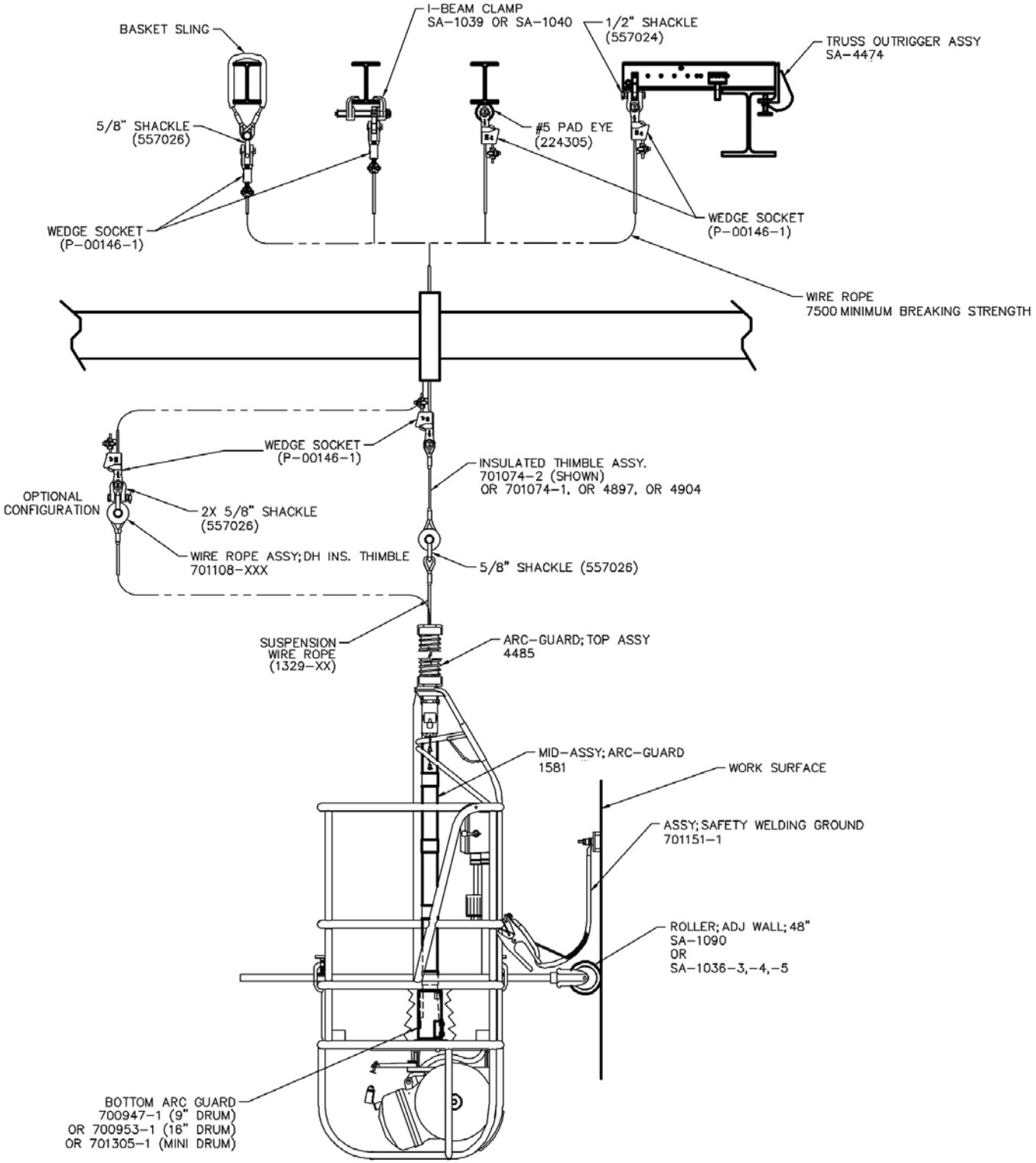




Wire Rope Insulation & Welding Accessories

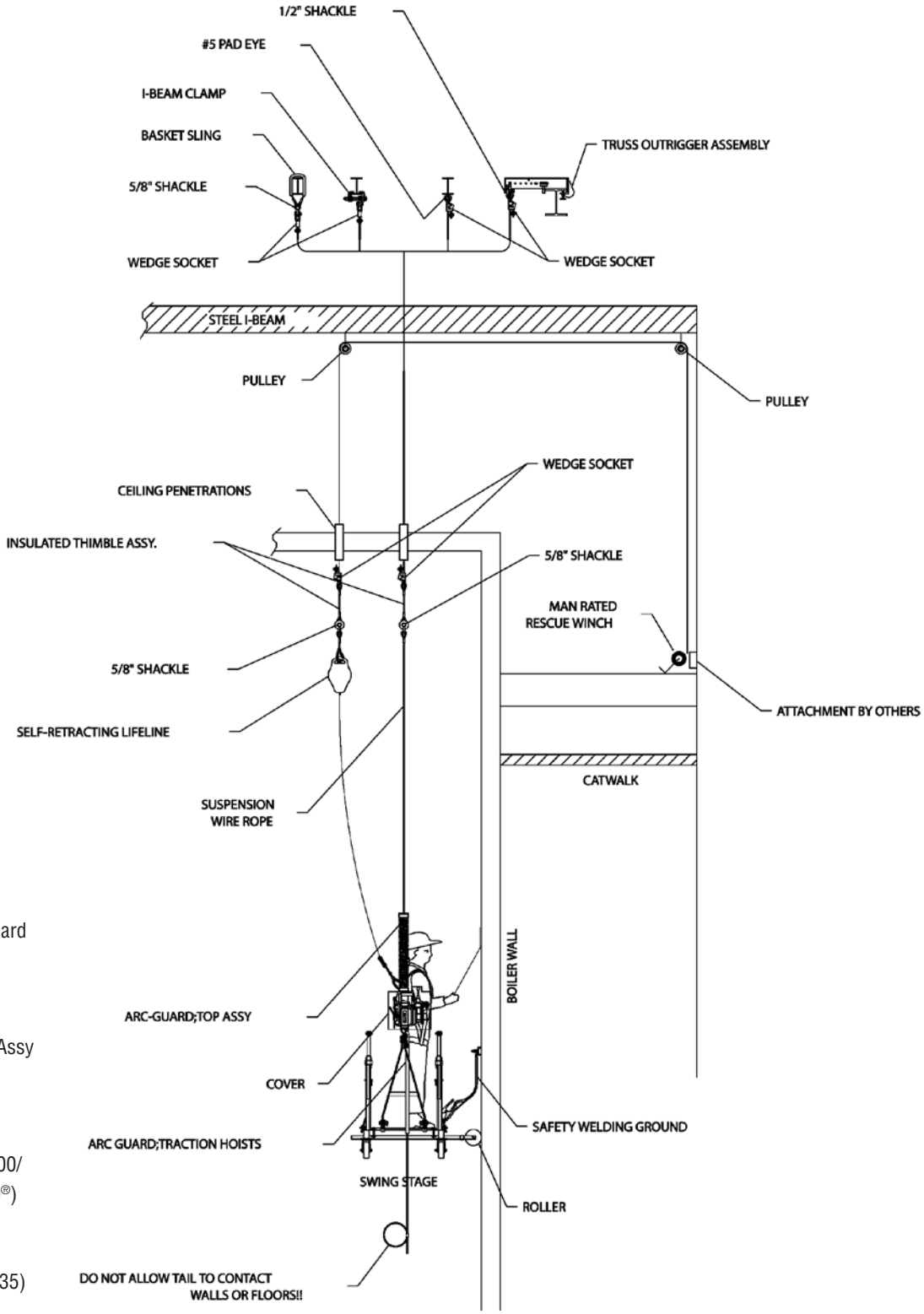
Part Number	Description	Function	Key Features	Used With	Component of Assembly
4485	Top Assembly Arc Guard	Protects wire rope above fairlead on drum hoist or above traction hoists	• 3 in. (76 mm) ID Durable Rubber Hose encloses wire rope • Extends 4 ft (1.2 m) above hoist • Compresses to allow travel up to rigging point • Installs easily with no tools	All Drum & Traction Hoists	SA-1083
1581	Mid-Assembly Arc Guard	Protects wire rope between fairlead and bottom arc guard	• Encloses 3.3 ft (1 m) length of wire rope between fairlead and deck of drum hoist • Can be used with traction hoists with minor modification • Velcro fasteners make installation fast and easy	All Drum & Traction Hoists	SA-1083
700947-1 [500 ft (152.4 m) drum hoists] 700953-1 [1000 ft (304.8 m) drum hoists] 701305-1 [235 ft (71.6 m) drum hoists]	Bottom Arc Guard	Protects wire rope as it spools on drum	• Heavy duty enclosure protects wire rope passing through deck to drum below • Time-tested design • Includes front and rear guards and mounting hardware	Drum Hoists: ST-17, ST-180, ST-19, ST-26	700947-1 is in SA-1083 700953-1 is in SA-1083-1000
701301-1	Arc Guard Assembly, SC30/SC40	Protects wire rope exiting hoist	• Attaches to end stirrup or walk thru stirrup to protect tail line • Includes mounting clips • Model for SC1000/SC1500 available on request	Traction Hoists: SC30/SC40	
701301-2	Arc Guard Assembly, ZMAC/1000®	Protects wire rope exiting hoist	• Attaches to ZMAC/1000® or walk thru stirrup to protect tail line • Includes mounting clips • Tubing encloses wire rope and extends 3.3 ft (1 m) below hoist	Traction Hoists: ZMAC/1000®, SC1000	
4897	Wire Rope Insulator Assembly	Insulates wire rope from rigging point	• Plastic dipped porcelain insulator assembly • Total length: 31 ft. (9.5 m) • Time-tested design	All Drum & Traction Hoists	
4904	Wire Rope Insulator Assembly	Insulates wire rope from rigging point when penetration size does not accommodate standard 4897 fittings	• Plastic dipped porcelain insulator assembly • Total length: 31 ft. (9.5 m) • Time-tested design	All Drum & Traction Hoists	
701074-2	Insulated Thimble Assembly, 1.25 ft (0.38 m) length	Insulates wire rope from rigging point	• Tested to withstand 600V • For use with hoists up to 1,500 lb. (680.4 kg) load capacity • Assembly length allows travel within 1.25 ft (0.38 m) of rigging point • No Fist Grips needed • Fully exposed wire rope makes inspection fast and easy	All Drum & Traction Hoists	
701074-1	Insulated Thimble Assembly, 30 ft (9.1 m) length	Insulates wire rope from rigging point	• Tested to withstand 600V • For use with hoists up to 1,500 lb. (680.4 kg) load capacity • Assembly length allows travel within 30 ft (9.1 m) of rigging point	All Drum & Traction Hoists	
701108-xxx xxx-shows length, available in 25 ft (7.6 m) increments	Insulated Wire Rope Assembly	With biscuit style insulator in assembly, insulates wire rope from rigging point	• Includes 8.4 mm insulated thimble • 5/16 in. (8 mm) 6x19 XIP FC construction • Min. breaking strength: 9,380 lb (4,254.7 kg) • Min. length: 150 ft (45.7 m) • Flemish eye splice with swaged steel sleeve • Swaged, forged cable drum hook	Drum Hoists: ST-17, ST-180, ST-19, ST-26, LSR1	
701118-xxx xxx shows length, available in 25 ft (7.6 m) increments	Insulated Wire Rope Assembly	With biscuit style insulator in assembly, insulates wire rope from rigging point	• Includes 8.4 mm insulated thimble • 5/16 in. (8 mm) 6x19 XIP IWRC construction • Min. breaking strength: 10,540 lb (4,780.9 kg) • Flemish eye splice with swaged steel sleeve • Tapered brazed bullet	Traction Hoists: SC30/40, SC1000/1500, ZMAC/1000®	
P-00146-1	3/8 in. (10 mm) Wedge Socket			All Drum & Traction Hoists	
701151-1	Safety Welding Ground	Grounds platform to work surface	• Extensive labeling permanently attached to device makes installation goof-proof • Large handle speeds magnet removal from work surface for faster relocation • Kellums grips prevent clamp from accidentally detaching from platform	All Platforms, Work Cages or Baskets	
9970	Hoist Cover – SC1000/SC1500	Protects hoist from airborne debris and contaminants	• Easy installation and removal • Viewing/access panels for emergency stop button and overspeed brake manual activation button • Drawstring or Velcro closure	SC1000/SC1500	
700784-1	Hoist Cover – ZMAC/1000®	Protects hoist from airborne debris and contaminants	• Easy installation and removal • Viewing/access panels for emergency stop button and overspeed brake manual activation button • Drawstring or Velcro closure	ZMAC/1000®	
94-001	Hoist Cover – SC30/SC40	Protects hoist from airborne debris and contaminants	• Easy installation and removal • Viewing/access panels for emergency stop button and overspeed brake manual activation button • Drawstring or Velcro closure	SC30/SC40	
SA-1036-3, -4, -5 and others	Wall Rollers	Hold platform or work cage off work surface	See Wall Roller Section for other options, page 83	All Drum & Traction Hoists	

Welding Installation Details: Drum Hoist



Installations to make suspended scaffold comply with OSHA Standard 29 CFR 1926.451 (f) (17).

Welding Installation Details: Traction Hoists



Traction Hoist Arc Guard Components:

Above the hoist:
4485 Arc Guard Top Assy

Below the Hoist:
701301-2 Arc Guard Traction Hoist (SC1000/ 1500 and Zmac/1000®)
701301-1 Arc Guard Traction Hoist (SC30/40/99115/99135)

Alternate: 1581 can be used below the hoist with modification

For a complete list of welding accessories, see page 135.

Suspended Platforms Job Survey Sheet

Date: _____ By: _____

Basic Information

Customer Name: _____ Tel: _____

Address: _____

Job Name: _____ Job Contact: _____

Job Address: _____ Tel: _____

Is user training required? Yes No

Is job site inspection needed? Yes No Length of Rental: _____

Delivery required (date & time requirements): _____

Description of work to be performed: _____

Number of fall arrest equipment: _____ Lifeline length: _____ Building height: _____ Wire rope length: _____

Power cord length: _____ Power cord adapter: _____ Total weight of platform (live and dead load): _____

Type of Suspended Equipment	Number	Size		Number	Size
Fixed Length Platform			Modular Platform		
Work Cage			Bosun Chair		
Work Cage w/ Extension			Hoist (describe)		
Other					

Type of Roof Support Equipment

Outrigger Beam (Overall length & overhang requirements)

Parapet Clamp (Size)

Outrigger Support (Describe)

Cornice Hook (Size)

Counterweights [50 lb (22.7 kg) each] (Number required)

Davits (Size)

Rolling Roof Dolly

Is truss required?

Movable Sockets (Number required)

Parapet Wall Height

Is it load bearing?

Other (Explain)

Other Information Required

Roof Conditions: _____

Describe Roof Access: _____

Building has useable rigging Yes No Location of tieback: _____

Erection required Yes No Location of first drop: _____

Relocate rigging required Yes No Special equipment required: _____

Pickup required (date & time) Yes No Special arrangements: _____

Hazards	Yes	No
Electrical lines		
Trees		
Broken Glass		
Other (describe)		

Wire Rope Inspection Report & Criteria for Removal of Rope from Service

WIre Rope Inspection Report	
Machine	Owned by
Machine Location	Manufacturer's ID#
Rope Application	
Rope Description	
Date of Inspection	Applicable Standards

The wire rope shall be inspected by a competent person for visible defects prior to each use and must have a thorough inspection once a month.

Criteria for Removal of Rope from Service					
Wire Rope	Location on Wire Rope				
Maximum wire rope size reduction of diameter 5% as compared to original wire rope diameter (typically 0.0156 in. for 5/16 wire rope and 0.0165 in. for 8.4 mm wire rope)					
Evidence of heat damage/corrosion/ pitting/abrasion/flattening					
Distortion of rope structure; crushing/kinking					
6 broken wires in 1 rope lay					
3 broken wires in 1 strand of 1 lay					
End Attachments					
1 broken wire within 18 in. of end attachments					
Other					
Look for damage – rope must have 3-ton (6,000 lb, 2,721.6 kg) minimum strength for 1,000 lb. (453.6 kg) rated capacity units; 3.75 tons (7,500 lb, 3,402 kg) for 1,250 lb. (567 kg) rated capacity units.					
Make sure rope is properly lubricated					

Rigging Checklist

Customer _____ Date _____ Rental Contract # _____ S6

Job Site _____ Serial Numbers _____

Competent Person _____

Note: The purpose of this check list is to provide useful reminders to a competent person inspecting suspended scaffold rigging and equipment. Always be sure to follow the manufacturer's instructions, SafeWorks guidelines, and any federal, state/provincial, and local regulations that apply. It is required that the competent person complete this form for each stage and every rigging operation BEFORE ANYONE OPERATES the equipment and/or before leaving the job site. The original document must be filed with the associated rental contract, in the branch customer files.

Support Systems	Yes	N/A
The structure is able to support the loads (roof deck, bearing walls etc.).		
Weight is spread out correctly, roof and parapet are protected as needed		
Loose lumber / plywood has been secured against wind conditions		
Suspension points are spaced the same as the hoists / verified by tape measure- Both are spaced @ _____ ft		
Clamps and hooks are seated and tightened correctly		
Outriggers are rated for the application, correct # of counterweights attached		
OBS frames or other beam supports are assembled per manufacturer's / supplier's instructions		
Caster brakes are locked or when required, the wheels are chocked		
All suspension rigging points can support 4 times the hoist capacity		
Tiebacks are properly configured, attached, and tied to adequate anchor point.		
The support equipment is clear of electrical power lines and obstacles that will interfere with the safe operation.		
The wire rope is long enough to reach the bottom of the drop (plus 4 feet for traction hoist or 4 turns on the drum).		
Suspension wire rope is in good condition and suspended correctly.		
Power cord has strain relief at source and at all connections , all edges it passes over are padded		
After load is applied, check that all fittings / fist grips are secure and torqued to specifications		
All loose items have been removed from area and secured		

Suspended Equipment	Yes	N/A
Lifelines are independently tied back to an adequate anchor point and padded to protect from abrasion.		
Lifelines and fall protection equipment have been inspected and are in good condition.		
A safety zone directly below the scaffold has been properly identified.		
Hoist/stirrup and platform connections properly secured with Grade 5 bolts, thread-locking nuts or cotter pins used		
All accessories (platform connections, wall rollers, toe boards, guard rails) of the scaffold have been installed and tightened with the proper hardware. Cotter/hitch pins installed.		
Hoists are in proper operating condition per manufacturer's instructions. The wire rope is reeved properly.		
On drum hoists, check that the rope is terminated at the drum properly, and the wraps are in good order.		
Step down transformers provided on the stage are secured by safety chain to the platform.		
Power cord has strain relief at platform and at all connections.		
The power supplied at the hoist is enough to operate it properly. Power has been checked with an in-line meter, under load. Continuity to ground has been verified.		
The suspended equipment is clear of electrical power lines and obstacles that will interfere with the safe operation.		
Handrails positioned at 42 inches above platform deck		
Toe Boards have been installed on all platform edges.		
Mesh (wire or plastic) has been installed on platform between toe board & top handrail.		
Welding protection has been installed.		
Operators manual attached to each hoist		
Platform has been raised to a suspended position. Re-torque wire rope fittings & check support system.		
Site Specific Requirements	**Yes**	
Platform has been raised to a suspended position.		
Operator Briefing	**Yes**	
Proper hoist operation / all features		
Fall protection requirements		
Wire rope inspection		
Electrical hazards / welding hazards & protection		
Check support equipment prior to use		
Load restrictions on platform		
Code of Safe Practices provided to scaffold users		
Indicate the location of all operators manuals		


Spider
Personal Fall Limiter

Fall Protection

Introduction

Spider Fall Protection: A natural extension of our access solutions

Spider: Where our design innovations reflect the real world

At Spider, we are fully committed to meeting our customers' safety needs by offering a wide breadth of fall protection products. We understand that our job is to help you do your job safely and efficiently. We're unique in the industry since, every day, we use the products we offer to customers. We know exactly how simple adjustments can make a world of difference in safety and comfort. Safety is part of our daily lives.

For over 65 years, contractors have depended on Spider to provide solutions that work – safely and profitably. You can see from our network of Spider branches and product offerings that we are providing these solutions in every major region in North America.

We set the standard for powered access equipment and fall arrest systems and continue to raise our customers' expectations when it comes to products, service and commitment.

- Fall Protection
- Safety Training
- Service Training

Three Components of a Personal Fall Arrest System

Three key components comprise the Personal Fall Arrest System (PFAS). Individually, these components will not provide protection from a fall. Used properly in conjunction with each other, however, they form a PFAS, which becomes vitally important to safety on the jobsite.

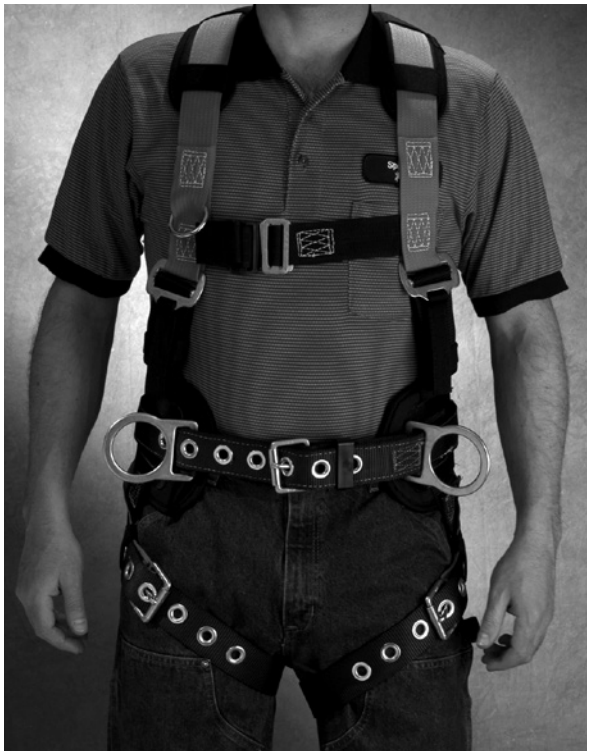
Anchorage/Anchorage Connectors

The first component of a PFAS is the anchorage/anchorage connector. An anchorage, commonly referred to as a tie-off point, may be an I-beam, column, rebar, scaffolding or other structural member. An anchorage connector is used to join the connecting device to the anchorage when a direct connection does not exist. It is important to select the proper anchorage/ anchorage connector for ultimate safety. Anchorages and anchorage connectors must be easily accessible, capable of supporting 5,000 lb (2,268 kg) of force per worker and must be located high enough for a worker to avoid contact with a lower level should a fall occur.

Spider offers a variety of convenient 5,000 lb. (2,268 kg) rated anchorage connectors for every application. All Spider anchorage connectors meet applicable OSHA requirements and ANSI standards for compliance and safety.

Body Wear

The second component of a PFAS is the body wear worn by workers while performing the job. Simply put, the full-body harness is the only acceptable form of body wear for fall arrest. Full-body harnesses distribute fall forces throughout the body, substantially reducing the chance of injury. In addition, the full-body harness keeps the worker suspended upright in the event of a fall and supported while awaiting rescue.



Harnesses should be selected based on the work to be performed and the work environment. Spider offers various configurations. All Spider harnesses meet applicable OSHA requirements and ANSI standards.

Spider harnesses are developed to insure maximum comfort and productivity for each user.

Connecting Devices

The third component of the PFAS is the connecting device. This may be a shock-absorbing lanyard, tie-back lanyard, retractable lifeline, rope grab and vertical lifeline or similar device used to connect the body wear to the anchorage/ anchorage connector. A connecting device should be selected based on the work to be performed and on the work environment. In addition, it is critical to consider potential fall distance when determining the type of connecting device to be used.

Spider provides a wide range of innovative, user-friendly connecting devices for every application.

Fall Calculator

How Long Does It Take to Fall?

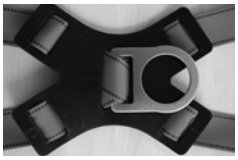
The formula for calculating fall distance over time is $h = 1/2g(t^2)$. Since we know that g, the acceleration due to gravity, is a constant of 32 ft/sec^2, then (1/2g) = 16. Using 16 in place of (1/2g), the formula becomes $h = 16(t^2)$.

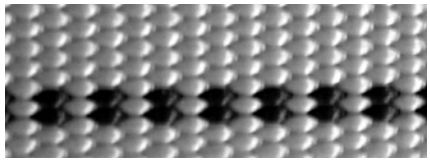
It is now simple to calculate distance or time by replacing either h (fall distance) or t (time) in the formula. For example, a body falls approximately 4 ft (1.2 m) in one half-second. The following table shows other examples of fall distance over time:

Time in seconds	Fall distance in ft (m)
0.5	4 (1.2)
1	16 (4.9)
1.5	36 (11)
2	64 (19.5)
2.5	100 (30.5)
3	144 (43.9)
4	256 (78)
8	1,024 (312)
10	1,600 (487.7)

Keep in mind that the reaction time of the body (the time it takes for the brain to recognize a fall and tell the body to take the appropriate action) is approximately 3/4 of a second.

Harnesses NEW





Harness Sizing Chart	NEW: More Generous Sizing
Harness Size	**Waist Measurement**
Small/Medium	34 – 44 in. (864 – 1,118 mm)
Large/X-Large	42 – 50 in. (1,067 – 1,270 mm)
XX-Large	48 – 56 in. (1,219 – 1,422 mm)

Belt Size	Waist Measurement
Small/Medium	33 – 45 in. (838 – 1,143 mm)
Large/X-Large	33 – 45 in. (838 – 1,143 mm)
XX-Large	38 – 50 in. (965 – 1,270 mm)

The right harness should be as comfortable as your regular clothing. Strap on a Spider harness and you'll feel the difference. Pull the straps and it's instantly sized for your body.

Spider harness features:

- Lanyard loop eliminates slack and tripping hazards
- Sewn-in chest strap assures proper position
- No-slip SURE-GRIP web prevents loosening for constant fit
- Fastening options:
  - Adjustable mating buckle for fast hook-up and proper fit
  - Tongue buckle leg straps allow quick, secure adjustments
- Durable, removable tool belt (optional)
- 6 in. (152 mm) padded back support for maximum comfort and fatigue reduction (optional)
- Replaceable shoulder pads to distribute the weight of the tool belt (optional)
- Sub-pelvic strap gives greater support and keeps the user upright while arresting a fall
- Sliding back D-ring
- Quick to don and easy to adjust
- Sturdy hardware
- NEW webbing makes visual inspection easy: If fraying reaches black line, remove from service
- NEW D-ring pads
- NEW lanyard keepers:
  - made of Delrin® polymer
  - now conveniently located on the right
  - meets the draft of ANSI Z359, allowing for breakaway if worker's lanyard snags
- NEW Delrin® slides replace elastic bands to hold excess webbing for a cleaner look

Harness Family	Side D-rings	Front D-ring	Retrieval Rings	Lanyard Loops	Waist Belt	Shoulder Pads	Back Pad	Stretch Material
Fall Arrest	No	No	No	1	No	No	No	No
Stretch Fall Arrest	No	No	No	1	No	Yes	No	Yes
Fall Arrest With Waist Belt	No	No	No	1	Yes	No	No	No
Constructor	Yes	No	No	1	Yes	Yes	Yes	No
Stretch Constructor	Yes	No	No	1	Yes	Yes	Yes	Yes
Constructor, double loop	Yes	No	No	2	Yes	Yes	Yes	No
Confined Space Entry	No	No	Yes	1	No	Yes	No	No
Positioning	Yes	No	No	1	No	No	No	No
Climbing	No	Yes	No	1	No	No	No	No

Technical Data – Full-Body Harnesses

Certification:	Fully complies with ANSI A10.32, 2004 and ANSI Z359.1, 2007 standards and all OSHA requirements, including 1910.66 Appendix C and 1926 Subpart M, and CSA Z259.
Description:	A full-body fall arrest harness offering lightweight webbing, leg adjustments, chest strap, back sliding D-ring for fall protection and semi-universal sizing
Identification:	Identification is made by a tag attached to the harness stating manufacturer, date of manufacture, model and serial number.
Material of Construction:	Webbing: 1 3/4 in. (44 mm) Nylon webbing D-rings: Stamped steel D-ring with minimum tensile strength of 5,000 lb (2,268 kg). The D-ring is cad or zinc plated and meets the ASTM fifty-hour salt spray test requirements. 100% proof tested
Load Limit:	1 Worker (310 lb [140.6 kg] – person, tools, etc.)
Weight:	3-5 lb (1.4-2.3 kg), depending on model
Warranty:	All Spider harnesses are warranted against any defects in workmanship and materials for a period of one year from the date of purchase when purchased in the United States. This warranty does not cover damage caused by accident, abuse, misuse or an act of God (such as a flood). Consequential and incidental damages, including without limitation, loss of property and those arising from breach of any express or implied warranty, are not the responsibility of Spider and, to the extent permitted by law, are excluded.

Call or click for more information
1-877-774-3370
www.spiderstaging.com

Usage Guidelines - Six Steps That Could Save Your Life: How To Don a Harness

Step 1:
Hold harness by back D-ring. Shake harness to allow straps to fall into place.

Step 2:
If chest, leg and/or waist straps are buckled, release straps and unbuckle at this time.

Step 3:
Slip straps over shoulders so D-ring is located in middle of back between shoulder blades.

Step 4:
Pull leg straps between legs and connect to opposite end. Repeat with second leg strap. If belted harness, connect waist strap after leg straps.

Step 5:
Connect chest strap and position in mid-chest area. Tighten to keep shoulder straps taut

Step 6:
After all straps have been buckled, tighten all buckles so that harness fits snugly but allows full range of movement. Pass excess strap through loop keepers

Basic Fit Harness

Conforms and tested to OSHA and ANSI compliance when harness replacement happens often

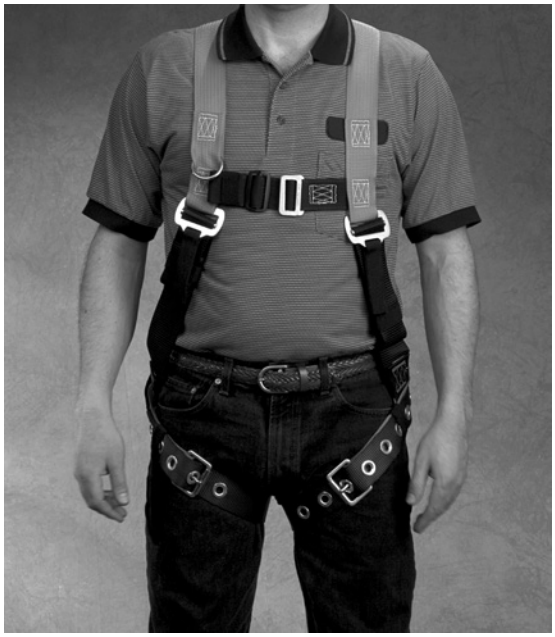
Key Features:

- Conforms and tested to OSHA 1926 Subpart M and ANSI Z359.1-2007
- Lightweight and comfortable for all day use
- NEW D-ring pad for added comfort
- One of the most affordable harnesses on the market
- 2-color design makes donning the harness easier
- Spider logo tag
- Made in the USA

Specifications:			
Sizes			
Mating (parachute) buckle:		**NEW Tongue (grommet) legs:**	
S/M	707785-1	S/M	707783-1
L/XL	707785-2	L/XL	707783-2
XXL	707785-3	XXL	707783-3
Webbing			
Material:		Nylon	
Tensile Strength:		Min. 5,000 lb	
Hardware			
D-ring Material:		4130 Steel	
D-ring Tensile Strength:		Min. 5,000 lb	
Adjusters Material:		4130 Steel	
Adjusters Tensile Strength:		Min. 5,000 lb	
Technical			
Max Worker Rating:		310 lb (140.6 kg)	
Certification		Meets the following at time of shipment: ANSI: Z359.1-2007, A10.32-2004 OSHA 1926 Subpart M, 1910.66 App. C	

Call or click for more information
1-877-774-3370
www.spiderstaging.com

Fall Arrest standard

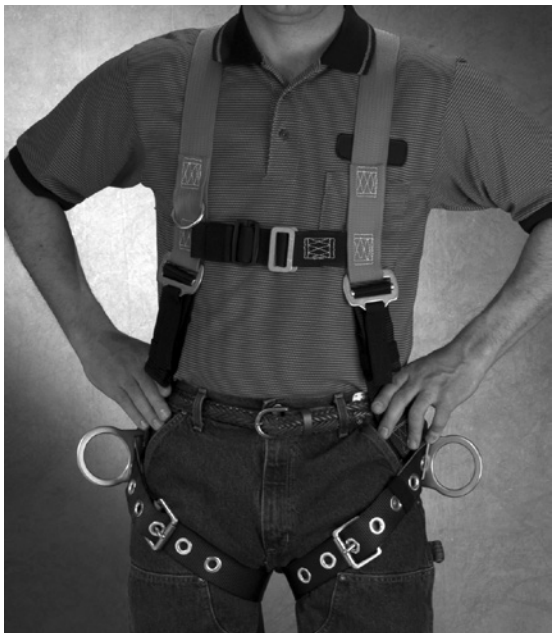


Mating Buckle:	S/M 707795-1	L/XL 707795-2	XXL 707795-3
Tongue Buckle:	S/M 707793-1	L/XL 707793-2	XXL 707793-3

Stretch:

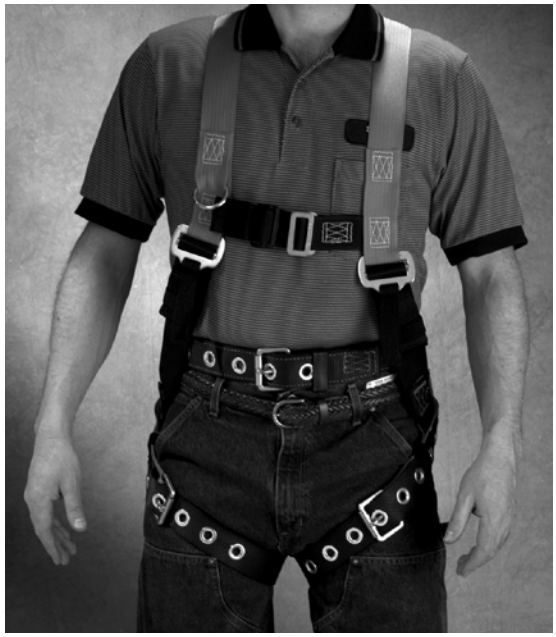
Mating Buckle:	S/M 701372-1	L/XL 701373-1
Tongue Buckle:	S/M 701374-1	L/XL 701375-1

Positioning



Mating Buckle:	S/M N/A	L/XL 701365-1
Tongue Buckle:	S/M 701364-1	L/XL 701366-1

Fall Arrest standard, with tool belt



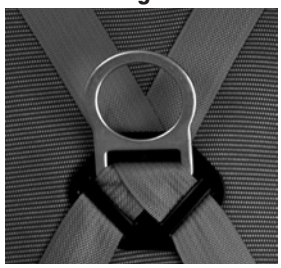
Mating Buckle:	S/M N/A	L/XL 701265-1
Tongue Buckle:	S/M 701266-1	L/XL 701267-1

Your choice of fastening options:

Adjustable mating (or parachute) buckles for fast hook-up and proper fit

Tongue (or grommet) buckle leg straps allow quick secure adjustments

NEW D-Ring Pads



Standard on Fall Arrest and Basic Fit.

Large X shaped pad on Constructor and Stretch Constructor

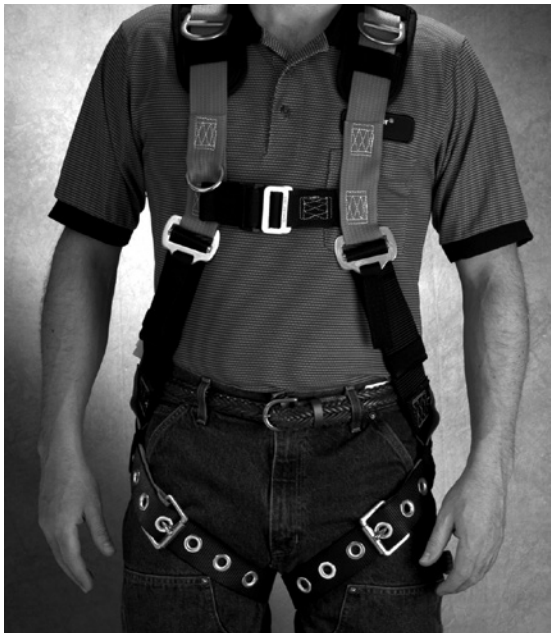
Constructor for steel erectors and riggers

Mating Buckle:	S/M 707788-1 L/XL 707788-2	XXL 707788-3
Tongue Buckle:	S/M 707787-1 L/XL 707787-2	XXL 707787-3
Stretch:		
Mating Buckle:	S/M 707786-1 L/XL 707786-2	XXL 707786-3
Tongue Buckle:	S/M 707782-1 L/XL 707782-2	XXL 707782-3

NEW breathable mesh material on shoulder pads for cooler more comfortable wear

Also, NEW covering over labels on chest strap protects from paint overspray or catching on hazards

Confined Space Entry with shoulder D-rings

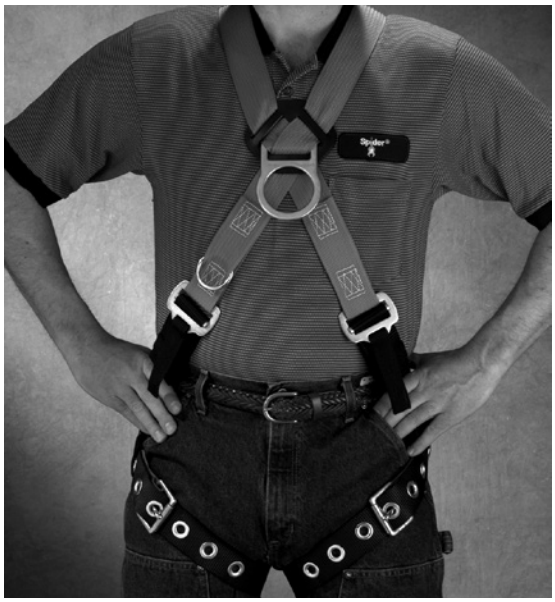


Mating Buckle:	S/M 701359-1	L/XL 701361-1
Tongue Buckle:	S/M 701360-1	L/XL 701362-1

Nylon Loop reduces risk of conductivity in electrical environments

Mating Buckle:	S/M 701244-1	L/XL 701246-1
Tongue Buckle:	S/M 701245-1	L/XL 701247-1

Climbing for controlled descent, ladder climbing



Mating Buckle:	S/M 701248-1	L/XL 701250-1
Tongue Buckle:	S/M 701249-1	L/XL 701251-1

Relief Step™ Safety Device Helps Prevent Suspension Trauma

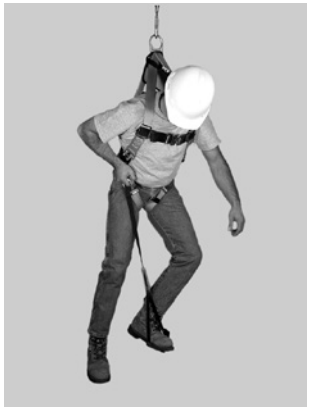
BD-9099-1
BD-9099X-12 (Package of 12)

The Miller Relief Step™ Safety Device alleviates the effects of orthostatic intolerance, also known as suspension trauma.

If a fall occurs, a person becomes suspended in a harness and remains both vertical and sedentary for a period of time, causing blood to pool in the veins of the legs. Subsequently, blood flow is reduced to the brain and other major organs which may initially result in unconsciousness. If not rescued promptly, serious injury or death may occur. The Miller Relief Step™ is designed to provide a short-term solution in preventing suspension trauma.

- OSHA states that potentially fatal suspension trauma can occur within minutes while waiting for rescue after a fall.
- Average fall rescue time is 15 minutes
- The Relief Step™ Safety Device provides support and enhances blood circulation until rescue, permitting the ability to move and flex leg muscles.
- Small and lightweight; Utilizing two Relief Steps™ (one for each leg/foot) assures greater comfort until rescue is completed.

Pull tab to deploy



Insert foot into loop step and adjust

Ability to stand allowing improved circulation

Two Relief Steps provide added support, balance and comfort

Lanyards

Every personal fall arrest system requires a high-quality lanyard as a critical link between the anchorage and the harness. To ensure worker safety, Spider lanyards are manufactured with the highest-quality components available.

- Heavy-duty webbing with tamper-resistant locking snap hooks
- Quality workmanship
- Comfortable design that enhances maneuverability

Internal Shock-Absorbing Y-Lanyards

- Reduces snagging, dragging and tripping hazards
- Load indicators on each leg
- Twist lock hook for fast, safe tie-off
- Self-closing
- Self-locking
- Standard gate is rated to 3,600 lb (1,632.9 kg); 5,000 lb. (2,268 kg) gate also available
- Larger area to capture anchor point
- User-friendly–easy to use while wearing gloves

Web Lanyards *for lightweight ease*

Your choice of styles:

- 3 ft (0.9 m) web for use with rope grabs
- 6 ft (1.8 m) web, standard for 6 ft (1.8 m) tie-off
- Adjustable web, from 4-6 ft (1.2-1.8 m), reduces free-fall distance
- Shown with Shock Pack

Web Tieback Lanyard (707792-1)

NEW

Tieback safely with the shock absorber and 5,000 lb (2,268 kg) gate load capacity from any angle.

- Meets ANSI Z359.13
- New gate strength allows lanyard to be wrapped back and clamped on itself
- Webbing has minimum breaking strength 8,500 lb (3,856 kg) and is abrasion resistant
- Shown with rescue ring which is not intended for tieback use.

6 ft (1.8 m) Web Lanyard with Shock Pack

Internal Shock-Absorbing Lanyards

- Lightweight 6 ft (1.8 m) lanyard
- Expands 4-6 ft (1.2-1.8 m)
- Reduces snagging, dragging and tripping hazards

Y-Lanyards *for 100% tie-off while climbing or transversing*

Your choice of hooks:

- 5/8 in. (16 mm) Double Lock Hook
- 2 1/4 in. (57 mm) Form Hook
- 2 1/2 in. (64 mm) Ladder Hook
- Shown with Shock Pack

NEW

Rescue Ring

- Built into all 6 ft (1.8 m) lanyards for safe worker retrieval
- Rescuer connects the rescue safety line to the rescue ring and releases the connector to the rope grab on the primary safety line.
- 100% tie off is achieved during rescue.
- For emergency use only.

Double Lock Snap Hook

Form Hook

Ladder Hook

Shock-Absorbing Lanyards (Options and Part Numbers)

Match your desired hook with your desired lanyard to find the part number.

	3 ft (0.9 m) Web	6 ft (1.8 m) Web	6 ft (1.8 m) Y-Web	6 ft (1.8 m) Internal Web	6 ft (1.8 m) Internal Y-Web
Double Lock Hook	707784-1	707794-1	707791-1	707789-1	707790-1
Form Hook	707784-2	707794-2	707791-2	707789-2	707790-2
Ladder Hook	707784-3	707794-3	707791-3	707789-3	707790-3

SRL; Twin Turbo (704346-1)

Achieve 100% tie-off while reducing fall distance to inches.

Key Features:

- Preferred fall arrest system when performing mid air transfers, working over water or where dangling independent safety lines pose a hazard
- Requires less fall clearance because it arrests a fall within inches
- Replacement for Y-Lanyards
- Connects to the back D-ring of any fall protection harness
- Permits retractables to swivel in multiple directions for greater mobility
- Webbing pays out smoothly – extends/retracts without interruption
- Similar weight to standard Y-Lanyards

Part Number	End Connector	Weight
704346-1	ANSI Snap Hook	4.9 lb (2.2 kg)
704346-2	ANSI Rebar Hook	6.7 lb (3 kg)
704346-3	Snap Hook	4.7 lb (2.1 kg)
704346-4	Rebar Hook	6.1 lb (2.8 kg)
704346-5	Aluminum Snap Hook	4.2 lb (1.9 kg)
704346-6	Aluminum Rebar Hook	5.6 lb (2.5 kg)

Specifications:	704346-1
Webbing Tensile Strength:	Min. 5,000 lb (2,268 kg)
Working Length Capacity:	6 ft. (1.8 m)
Technical Max Worker Rating:	400 lb (181.4 kg)
Certification	Meets the following at time of shipment: ANSI: Z359.1-2007, A10.32 OSHA: 1926.502, 1910.66 CSA: Z259.12-01 Class 1, Z59.2.2-98

Rebar Assemblies

Chain and webbing

Work positioning connectors used in form work and rebar applications

BD-00015:

- 14 in. (356 mm) chain with adjusting link
- 2 double locking hooks
- 1 double locking form hook with swivel

701270-1:

- 13 in. (330 mm) web
- 2 double locking hooks
- 1 double locking form hook

Rope & Cable Grabs

BD-00005

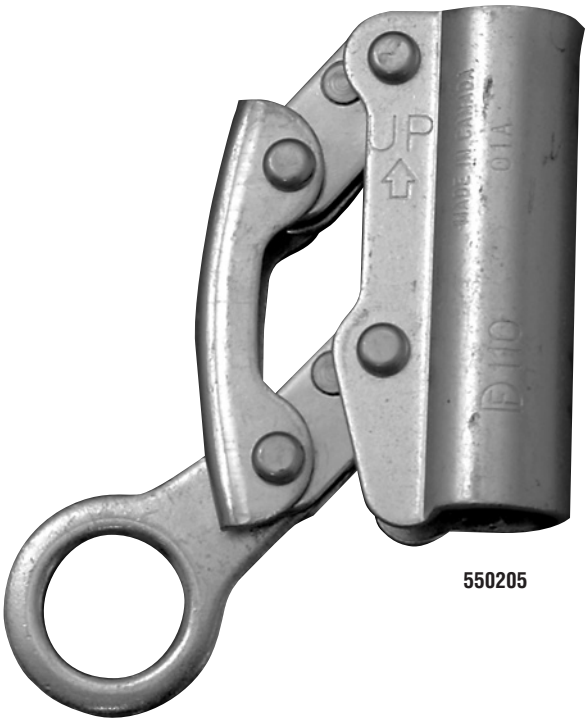
Ideal for towers, swing stages, scaffolding, steel erecting and roofing, Spider Rope Grabs move easily up and down vertical lifelines to provide continuous fall protection.

Many can be attached or detached at any point on the lifeline. Trailing models offer complete hands-free operation for increased productivity. In the event of a fall, Spider Rope Grabs lock instantly.

- Solid, corrosion-resistant stainless steel
- Large attachment ring helps prevent rollout on trailing rope grabs
- Serialized for identification
- Installation instructions on grab speed correct placement

Trailing Rope Grab

- Designed as part of a comprehensive fall protection system
- Stainless steel
- Exceeds ANSI and OSHA 5,000 lb (2,268 kg) minimum standards for strength



550205

Universal Rope Grab

- Manually operated for positioning along lifeline
- Used with 5/8 or 3/4 in. (16 or 19 mm) synthetic rope

701257-1 with 3 ft (0.9 m) web lanyard
701257-2 with 4 ft (1.2 m) web lanyard
701351-1 with 4 ft (1.2 m) internal shock web lanyard

Also Available:
Panic Grab BD-00020

- 5/8 in. (16 mm) diameter
- CSA Approved

Rope & Cable Grabs	
BD-00005	5/8 in. (16 mm) Diameter Stainless Steel Trailing Rope Grab
BD-00020	5/8 in. (16 mm) Diameter Stainless Steel Trailing Rope Grab with Panic Grab
P-00213	5/16 in. (8 mm) Cable Grab
550205	3/4 in. (19 mm) Diameter Rope Grab
539601	Wire Rope Grab

P-00213

Technical Data – Spider Rope Grab	
Part Number:	BD-00005, BD-00020
Certification:	Spider Rope Grabs meet or exceed the requirements of OSHA 1926 Subpart M, ANSI A10.14 and ANSI Z359.1 at the time of shipment.
Description:	An automatic fall arrestor designed to self-lock on a safety line in the event of a fall. Provides hands-free operation on a vertical weighted safety line. Double lock closing mechanism. Hinged design to allow attachment anywhere along the safety line. Large ring for direct web attachment or snap hook connection. Designed for 5/8 in. (16 mm) rope.
Identification:	Identification is made by an impression stamp on the body stating manufacturer, working load, allowable rope size and model number.
Material of Construction:	All non-corrosive materials; stainless steel, brass and bronze
Load Limit:	1 worker [350 lb (158.8 kg) - person, tools, etc.]

Technical Data – Cable Grab	
Part Number:	P-00213
Certification:	The Spider Wire Rope Grab meets or exceeds the requirements of OSHA 1926 Subpart M, ANSI Z359.1-1992, ANSI A10.14 and CE EN 353-1 / 353-2 at the time of shipment.
Description:	A mobile fall arrest device for use with 5/16 in. (8 mm) wire rope. It is designed to enable safe climbing and descent when used properly in conjunction with a complete personal fall arrest system.
Identification:	Identification is made by the presence of impression stamps on the side plates of the grab.
Material of Construction:	High strength, corrosion-resistant stainless steel
Minimum Tensile Strength:	5,000 lb (2,268 kg)
Weight:	1 lb. (0.5 kg)

Rope Grabs and Free Fall Distance

How do I configure a PFAS if my rope grab is stamped with “Only use with a 3 ft lanyard”?

This warning is intended to cover the worst case scenario where the grab is being used in its trailing design, such that the grab is trailing at its lowest point – well below the worker’s harness D-ring. When the grab is trailing below the worker and the worker falls, the worker will free fall a distance equal to two times the length of the lanyard. Therefore, with a 3 ft lanyard a worker will free fall OSHA’s maximum allowable distance of 6 ft. If the lanyard were any longer, the free fall distance would exceed this allowable free fall distance.

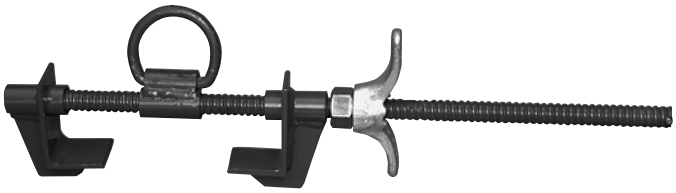
However, if the worker maintains the grab at chest height (or higher), the use of a lanyard longer than 3 ft is permitted. This is why we train workers to position the grab at chest height or above, depending on the application.

The configuration of the PFAS is the responsibility of the on-site competent person.

Beam Clamps

A personal mobile anchor point when attaching to steel I-beams or columns

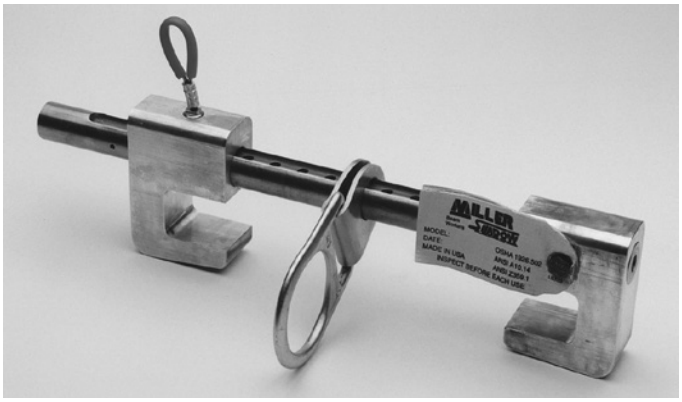
Used to join the connecting device to the anchorage when a direct connection does not exist



P-00227
Fits beams of 4-12 in. (102-305 mm)

Vertical Beam Clamps

- For use on vertical columns for stationary tie-off
- Quick to install
- Durable
- Load capacity: 5,000 lb (2,268 kg)
- Working Load: 310 lb (140.6 kg)



BD-00008
Fits beams of 4-12 in.(102-305 mm)

Horizontal Beam Clamps

- May be used on top or bottom flanges
- Portable
- Lightweight aluminum
- Quick to install
- Spring locking for easy adjustment
- Load capacity: 5,000 lb (2,268 kg)
- Working Load: 310 lb (140.6 kg)
- Variety of sizes available

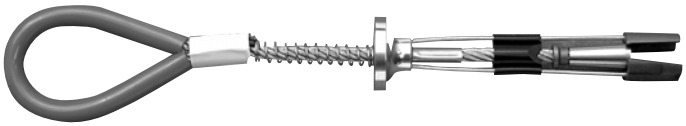
Beam clamps cannot be used as a hoist/basket connection point.

Spider Bolt

Portable, reusable anchorage connectors designed for use in concrete applications

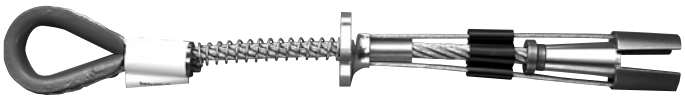
- A safe anchor point is established when the Spider Bolt anchor is inserted into a properly-sized, cured concrete hole.
- The reusable Spider Bolt anchor can be removed and simply reinstalled in a new location.
- Designed for vertical or overhead/ceiling surface applications
- Constructed of stainless steel, aluminum and other non-corrosive materials for a longer service life
- Designed for use in cured concrete with a compression strength of at least 3,000 psi
- Color-coded to differentiate fall protection from multi-use models per OSHA regulations

Fall Protection Anchorage Connectors



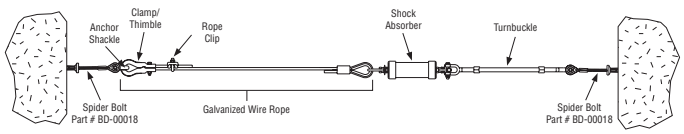
BD-00009

Designed for single user fall protection applications. A safe 5,000 lb. (2,268 kg) anchor point is established by drilling a 3/4 in.(19 mm) diameter hole in cured concrete and inserting the Spider Bolt anchor. The maximum capacity is 400 lb (181.4 kg). A variety of connecting devices, including a shock-absorbing lanyard or self-retracting lifeline, can be attached to the Spider Bolt. (This unit is color-coded green to indicate fall protection use only.)



BD-00018

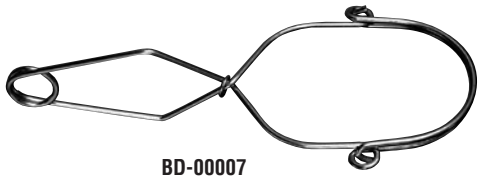
Designed for single user fall protection applications or as anchorage connectors for a dual user temporary horizontal lifeline system. A safe 10,000 lb. (4,535.9 kg) anchor point is established by drilling a 1 in. (25 mm) diameter hole in cured concrete and inserting the Spider Bolt anchor. The maximum capacity is 400 lb (181.4 kg). (This unit is color-coded green to indicate fall protection use only.)



BD-00018-HLL Temporary Horizontal Lifeline Kit

Provides a temporary horizontal lifeline system that is quick and easy to install and accommodates two workers. Kit includes 60 ft (18.3 m) of galvanized wire rope lifeline, turnbuckle, shock absorber, combination clamp and thimble, wire rope clip, anchor shackle and two model BD-00018 Spider Bolt anchorage connectors.

Accessories

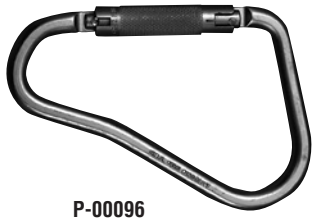


BD-00007
Wire Hook

BD-00014
48 in. (1,219 mm)
Cross Arm Strap

BD-00011
36 in. (914 mm)
Cross Arm Strap

P-00228
Twist Lock Carabiner



P-00096
Pompier Hook

Part Number:	Description:	Key Features:
BD-00007	Wire Hook	• Stainless steel • Spring-loaded wire hook • Connects to various anchorages including railings, small I-beams, angle iron and scaffolding • Working load: 400 lb (181.4 kg)
BD-00006	Cross Arm Strap	• Lightweight, durable, portable • Wraps around I-beams and other structures, forming a secure attachment point for lanyards and other connecting devices • 2 in. (51 mm) pass-through • Maximum capacity: 5,000 lb (2,268 kg) • Length: 72 in. (1,829 mm)
BD-00014	Cross Arm Strap	• Lightweight, durable, portable • Wraps around I-beams and other structures, forming a secure attachment point for lanyards and other connecting devices • 2 in. (51 mm) pass-through • Maximum capacity: 5,000 lb (2,268 kg) • Length: 48 in. (1,219 mm)
BD-00011	Cross Arm Strap	• Lightweight, durable, portable • Wraps around I-beams and other structures, forming a secure attachment point for lanyards and other connecting devices • 2 in. (51 mm) pass-through • Maximum capacity: 5,000 lb (2,268 kg) • Length: 36 in. (914 mm)
BD-00017	Push Through Eye Bolt	• Designed to be a temporary connection to steel structures • Maximum capacity: 5,000 lb (2,268 kg)
P-00228	Twist Lock Carabiner	• Self-closing • Self-locking • 1 in. (25 mm) gate opening
P-00096	Pompier Hook	• Self-closing • Self-locking • 2 1/4 in. (57 mm) gate opening

Vertical Lifelines

Spider Self-Retracting Lifelines (SRLs) are ideal for a full-range of applications including construction and general maintenance. Constructed of durable, impact-resistant housings with steel frames, Spider SRLs are designed to endure the demands of rigorous work environments.

- **Affordably priced–**The Spider line of retractables provides a better value than competitive units.
- **Quick-activating braking mechanism–**arrests free-fall to less than 2 ft (0.6 m), requires less fall clearance than a shock-absorbing lanyard and provides for a quick, safe rescue
- **Variety of working lengths–**lifelines available in 9-, 10-, 11-, 20-, 30-, 50- and 65 ft (2.7-, 3-, 3.4-, 6.1-, 9.1-, 15.2- and 19.8 m)
- **No annual factory re-certification required** (except in Canada where CSA currently requires annual factory re-certification) – lowers cost of ownership and increases productivity

Additional features/benefits:

- Integral handle – Wire rope models include an integral handle, making them easy to carry and install.
- Snap hook with swivel – prevents the lifeline from twisting and tangling
- Visual load indicator – indicates the unit must be removed from service
- Narrow payout port – minimizes debris entering unit
- Performance meets the standards: OSHA 1926.502, ANSI Z359.1, ANSI A10.14 and CSA Z259.2.2- 98 Type 2

11 ft (3.4 m) Web Retractable
BD-00012

- Lightweight: 2.6 lb (1 kg)
- 1 in. (25 mm) webbing
- Compact housing
- Swivel shackle
- Double lock hook
- 310 lb (140.6 kg) max. working load

9 ft (2.7 m) Spider Personal Fall Limiter
BD-00022

- Weight: 3.1 lb (1.4 kg)
- 1 in. (25 mm) webbing
- Stainless steel swivel
- Double lock hook
- 310 lb (140.6 kg) max. working load

BD-00010

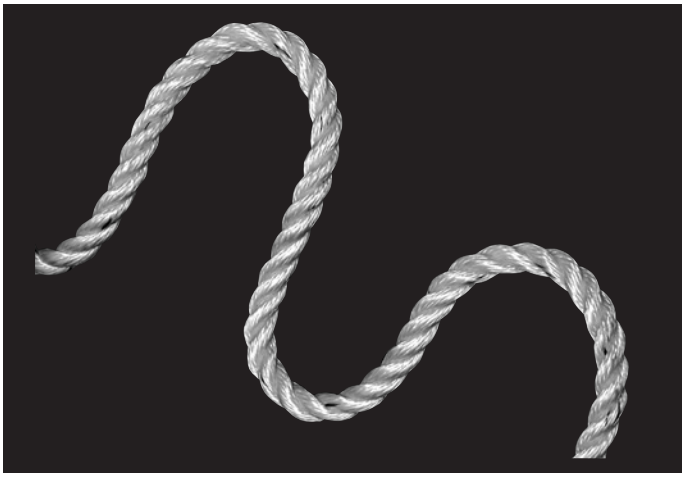
BD-00021

BD-00003 or BD-00016

BD-00001 or BD-00004

Part Number	Description	Length		Weight	
		(ft)	(m)	(lb)	(kg)
Lifeline Material: Synthetic Webbing					
BD-00022	Spider Personal Fall Limiter with stainless steel swivel	9	2.7	3.1	1.4
BD-00010	Retractable web lanyard with polyester webbing with swivel	10	3	2.3	1
BD-00012	Mini Spider Fall Limiter with stainless steel swivel	11	3.4	2.6	1.2
BD-00013	Retractable web lanyard with polyester webbing; aluminum & stainless steel housing	20	6.1	8	3.6
Lifeline Material: Galvanized Steel Cable					
BD-00021	Retractable cable lanyard with 3/16 in. (5 mm) galvanized steel rope and stainless steel swivel	9	2.7	4.5	2
BD-00003	Retractable cable lanyard with 3/16 in. (5 mm) galvanized steel rope; gas filled polypropylene housing	20	6.1	11	5
BD-00016	Retractable cable lanyard with 3/16 in. (5 mm) galvanized steel rope; gas filled polypropylene housing	30	9.1	13	5.9
BD-00001	Retractable cable lanyard with 3/16 in. (5 mm) galvanized steel rope; gas filled polypropylene housing	50	15.2	18	8.2
BD-00004	Retractable cable lanyard with 3/16 in. (5 mm) galvanized steel rope; gas filled polypropylene housing	65	19.8	19	8.6

Safety Line



The 704076 is a combination fiber rope with excellent wear and high strength to weight. The balanced rope construction offers the durability of polyester ropes and higher strengths than those of other combination ropes.

The 704076-xxx meets or exceeds the requirements of OSHA 1926 Subpart M and ANSI A10.14 at the time of shipment. This safety line is also ANSI Z359.1-2007 compliant.

For lifelines by the reel, see page 131.
For finished lifeline assemblies, see below.

Specifications:	704076-xxx
Weight:	9.4 lb per 100 ft (4.3 kg per 30.5 m)
Minimum Tenacity/ Elongation:	5,600 lb (2.540.1 kg)
Tested Tenacity:	Exceeds 10,000 lb (4,535.9 kg)
Composition:	680K Denier Industrial Polyester/680K Denier High Tenacity Copolymer over internal red & black tracers
Identification:	Red and Black Internal Tracer

Termination Plates (P-00245)
Eliminate knots in your lifeline. Knots can reduce lifeline strength by as much as 50% or more, depending on the type of knot.
Rated capacity: 5,000 lb (2,268 kg)

Safety Rope with Eye Splice Terminations

Part Number	Description
P-00250-50	LIFELINE; 50 ft (15.2 m); SNAPHOOK
P-00250-100	LIFELINE; 100 ft (30.5 m); SNAPHOOK
P-00250-150	LIFELINE; 150 ft (45.7 m); SNAPHOOK
P-00250-200	LIFELINE; 200 ft (61 m); SNAPHOOK
P-00250-250	LIFELINE; 250 ft (76.2 m); SNAPHOOK
P-00250-600	LIFELINE; 600 ft (182.9 m); SNAPHOOK
P-00261-100	LIFELINE; 100 ft (30.5 m); THIMBLE ONLY
P-00261-150	LIFELINE; 150 ft (45.7 m); THIMBLE ONLY
P-00261-200	LIFELINE; 200 ft (61m); THIMBLE ONLY
P-00261-250	LIFELINE; 250 ft (76.2 m); THIMBLE ONLY
P-00261-300	LIFELINE; 300 ft (91.4 m); THIMBLE ONLY
P-00261-400	LIFELINE; 400 ft (121.9 m); THIMBLE ONLY

SpiderLine™ Temporary Horizontal Lifeline System

NEW

Safe, Simple, Flexible

SpiderLine™ Temporary Horizontal Lifeline (THLL) is a safe, reliable, proven fall protection solution for ironworkers and those working on bridges, building construction, roof tops, and other elevated surfaces.

With improved standard features and new base options, this is our best SpiderLine™ yet, continually improving workers' safety and productivity at height.

Benefits:

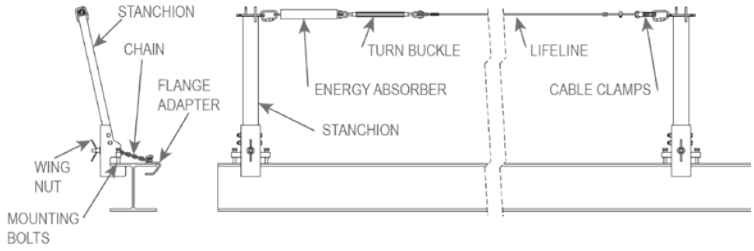
- Easy to install
- New base options optimize flexibility for multiple project needs.
- Improved energy absorber shear pin prevents over-tensioning and improves tension indication, minimizing the frequency of part replacement.
- Standard modular stanchion post makes it more affordable than competitors' systems and improves productivity by eliminating the need to frequently unhook the lanyard.
- Trip hazards are eliminated with the low profile chain and the vertical angle that allows an open walkway.
- Meets OSHA & CSA requirements

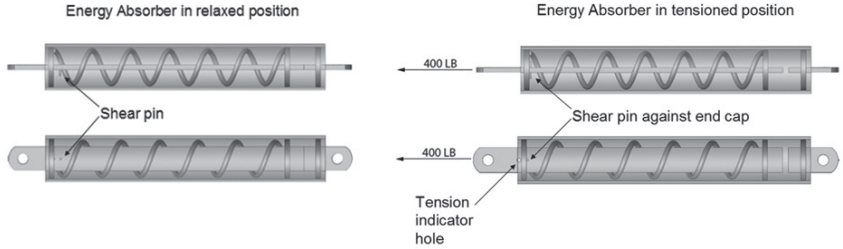
Features:

- **Easy to Install**
  - Top-of-beam bolts provide easier installation
  - Wing nut to tighten chain
- **Variety of Base Options**
- **Improved Energy Absorber Shear Pin**
- **Standard, Modular Pass-Through Stanchions**
  - Allow freedom to move without having to unhook
  - Eliminate the need to order additional parts
- **Simple, Robust Chain Clamp for I-Beam Stanchions**
  - Makes installation easy with no loose parts to lose
  - Wide clamp option accommodates beams up to 36 in. wide with flanges up to 3 3/8 in. thick
  - 12.5° vertical angle allows an open walkway for workers
  - Low profile chain eliminates trip hazards

Max Length	300 ft (91.4 m)
Max span between stanchions	60 ft (18.3 m)
Min span	20 ft (6.1 m)
Max persons per span	2
Max persons per installation	6
Wire rope	5/16 5 x 26 WS

Typical Assembly



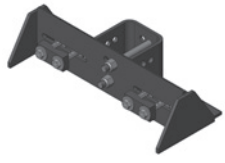


NEW Base Options for Optimal Flexibility

Bolt Down

Weld Down Flange

Weld Down No Flange



Pre-cast Beam Anchor

SpiderRail™ NEW

SpiderRail™ is a temporary, non-penetrating guardrail used to protect workers from fall hazards in the restoration, new construction, and process industries.

It is designed for easy and efficient assembly which meets and exceeds OSHA's fall protection requirements.

Whether you're looking for fall prevention on roofs, bridges, roads or loading docks, SpiderRail™ provides the strongest temporary rail system available. It is reliable, safe and easy to install for multiple project application needs.

Benefits:

- Provides more secure and confident working environment
- Easy to assemble
- Minimizes installation strain on workers
- Allows maximum work space
- OSHA compliant every time
- Easy to transport

EASY TO ASSEMBLE

- Lighter base plates are easier to carry and safer to position
- Patented technology saves assembly time and worker strain

STRONG, STABLE PROTECTION

- Swivel clamps and thumb screws provide the strongest temporary rail system
- Return or outrigger at the path ends are not needed

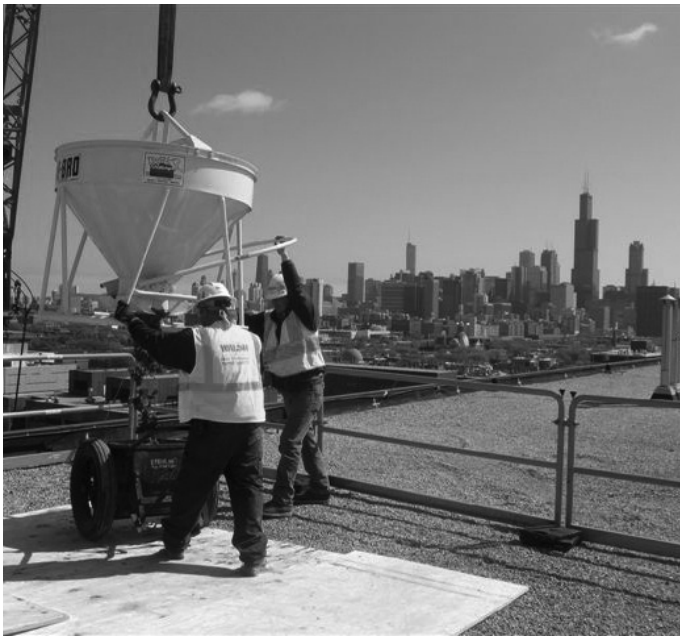
BUILT-IN TOEBOARDS

- Ensure OSHA compliance
- Eliminate lumber yard visits to collect 2x4s
- Measure and attach to panels without worrying about lumber disposal

EASY TO SOURCE, OPERATE AND OWN

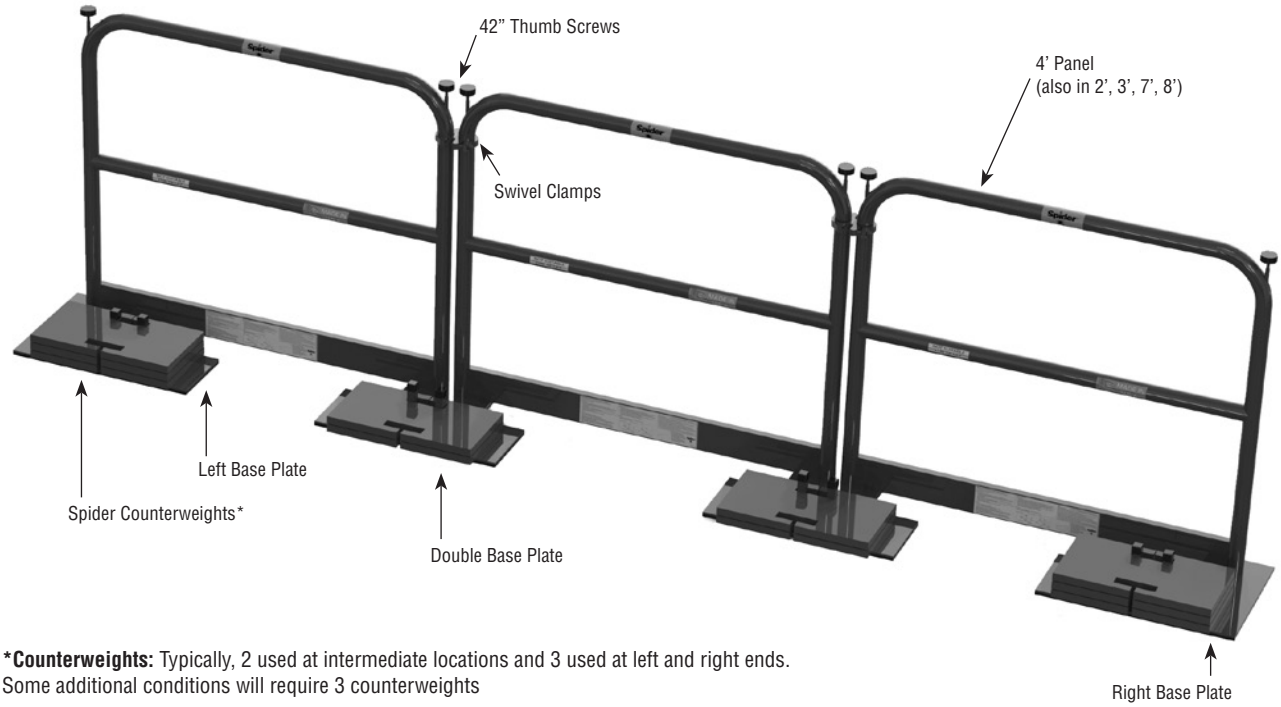
- Available for rent or purchase from 24 locations in the Americas
- Provides flexibility to accomodate your individual project needs

Call or click for more information
1-877-774-3370
www.spiderstaging.com



Specifications:	
Panel Dimensions:	Panels are made of 3 in. (76 mm) tubing, 42 in. tall (1.1 m), and come in lengths of 2 ft, 3 ft, 4 ft, 7 ft, and 8 ft (0.6 m, 0.9 m, 1.2 m, 2.1 m, and 2.4 m)
Construction:	Welded steel tubing
Base Dimensions:	23 in. (584 mm) x 23 in. (584 mm) x 13.5 in. (343 mm)
Toeboard Dimensions:	Welded in place, 4 in. (102 mm) tall
Heaviest Piece:	8 ft (2.4 m) panel is 50 lb (22.7 kg) Counterweight is 50 lb (22.7 kg)
Tools Required:	7/8 in. (22 mm) wrench

Typical Assembly



***Counterweights:** Typically, 2 used at intermediate locations and 3 used at left and right ends. Some additional conditions will require 3 counterweights

Also available: Corner Base Plates and 3 ft or 5 ft Gates

Call or click for more information
1-877-774-3370
www.spiderstaging.com

Debris Netting

Spider Debris Netting can be designed for any size or shape and include a variety of materials such as netting, rope, wire rope, webbing or any combination.

Spider Debris Netting is made of high tensile synthetic mesh designed to meet the most rigorous construction demands–and tested to meet or exceed ANSI A10.11. In addition, our shock-absorbing, diamond mesh netting is treated with inhibitors that protect it from normal wear and tear as well as ultraviolet degradation.

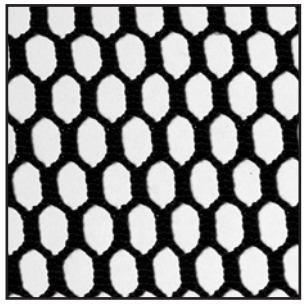
Spider Debris Netting is bordered with 5,000 lb. (2,268 kg) minimum test synthetic rope with attachment hooks 4 ft (1.2 m) on center and staggered for attachment to other nets.

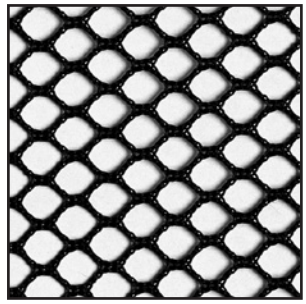
- Barrier Netting
- Bridge Netting Systems
- Cargo Netting
- Circular Netting
- Debris Containment Netting
- Dust Protection
- Heliport Netting
- Mezzanines
- Painter's Netting
- Perimeter Netting Systems
- Rock-Fall Mitigation Netting
- Sandblast Protection
- Scaffolding Enclosure Netting
- Vertical Debris Netting
- Weather Protection

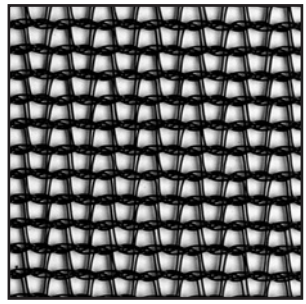
Contact your Spider professional for an integrated netting solution for your specific requirements

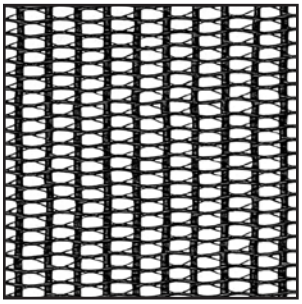
Call or click for more information
1-877-774-3370
www.spiderstaging.com


DNR75B


DNR800


DNR900


WS50


DNR18B


DNR180R


DNR750R

Perimeter Debris Netting

Perimeter debris netting from Spider is not only smart safety, it's smart business. For those big jobs, you need to protect your workers and the public. That's where we excel. Spider Debris Netting is a sturdy, reliable, factory-tested perimeter netting that can be designed for any size and/or shape.

Spider also sells all of the installation hardware you'll need. Our two-piece aluminum poles are designed to be strong and lightweight so they are easy to transport and set up. They do not require a crane for installation.

Vertical Debris Netting

Our vertical debris netting can wrap a building into a cocoon of safety, protecting workers, pedestrians and adjacent properties. The netting is ultra-durable, fire-retardant, reusable and can be moved from floor to floor. Our system complies with OSHA regulations and meets CPAI-84, Section 6, Tent Walls and Tops.

Perimeter Netting Hardware

Spider has a complete line of hardware for installing any of our debris and personnel safety netting systems.

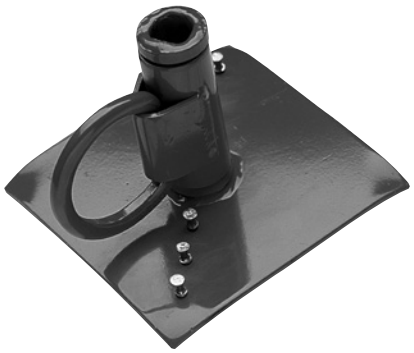
- Cable, Rope and Lashing
- Clamps
- Eye Bolts
- Hooks
- Lifting Bridles
- Manila Rope
- Shackles

Roof Anchors

Spider roof anchors provide fall protection when working on wood or metal roofs.

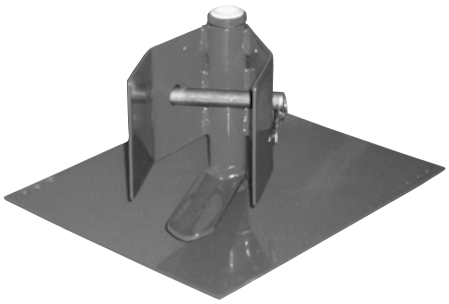
Standing Seam Roof Anchor
P-00086 (Retractable sold separately)

- Provides continuous protection and freedom of movement on flat or sloped, seamed roofs
- Telescoping leg allows for use on seams up to 36 in. (914 mm) apart
- Accepts Spider 20-65 ft (6.1-19.8 m) retractable lifelines
- Load limit: 310 lb (140.6 kg)
- Weight: 33 lb (15 kg)
- 360° swivel
- Easy to install
- Portable
- Must be used with Self Retracting Lifeline as part of PFAS.



Nail Down Roof Anchor
P-00236

- Attaches to roof using six 16p double headed nails, nailed into a rafter or truss
- Reusable
- 6 mounting holes
- Load limit: 310 lb (140.6 kg)
- Weight: 20 lb (9.1 kg)
- 360° swivel
- Durable steel



Screw Down Metal Roof Anchor
P-00601

- Reusable screw down plate
- 10 mounting holes
- Load limit: 310 lb (140.6 kg)
- Weight: 19 lb (8.6 kg)
- 360° swivel
- Durable steel

Welding Accessories

Insulator/Thimble 701074-2

Welding ground 701151-1

Hoist Covers

Part Number	Description	Used With:
94-001	Hoist Cover	SC30, SC40
9970	Hoist Cover	SC1000, SC1500
701018-1R	Hoist Cover: disposable polypropylene	Zmac/1000®
700784-1	Hoist Cover: canvas	Zmac/1000®

For more detailed information, see page 135.

Inspection

Harnesses

Inspect the harness material. Hold the material/webbing in an inverted "U" with the body side toward the body and hands 6 in. (152 mm) apart. Inspect the entire length, looking for frayed edges, broken fibers, pulled stitches, cuts or chemical damage. Broken strands appear as tufts on the webbing surface. Broken, cut or burned stitches are easily seen.

Inspect buckles and D-rings. Make sure both are firmly attached. Inspect condition of D-ring and metal wear pads. Buckle tongues should be undamaged, overlap the buckle frame and move freely back and forth. The roller should turn freely on the frame. Look for sharp edges. On friction buckles, make sure outer and center bars are straight. Pay particular attention to corners and attachment points of the center bar. On sliding bar buckles, inspect the frame and sliding bar for cracks, distortion or sharp edges. The bar should glide freely. Pay special attention to the corners and ends of the sliding bar.

Check belt ends to make sure grommets are still in place. Belts with grommet-less holes should be checked for torn or elongated holes.

Carefully inspect each harness each time it is used. At least once every 3 months, harnesses should be examined by a trained inspector. Maintain each harness according to manufacturer's instructions.

Lifelines

Examine the surface of manila rope for cuts and worn or broken fibers. Discard any rope that has become smaller in diameter or has a smooth look. Inspect inner fibers of the rope for breaks, discoloration and deterioration; discard if it shows any of these signs.

Examine wire rope for broken strands, rust and kinks that may weaken it. Ropes must be kept clean, dry and rust-free. They should be lubricated frequently, especially before use in acidic atmospheres or before exposure to salt water. After such use, it should be carefully cleaned and coated with oil.

Polypropylene rope can be weakened by heat, continued exposure to direct sunlight and broken or cut strands. Examine the cover yarn frequently for signs of damage or deterioration.

Carefully inspect lines each time they are used. Inspect and maintain according to manufacturer's instructions.

Rope Grabs

Clean rope grabs before each use. Do not allow them to become dirty or sticky during use. Inspect before each use to make sure there are no worn, bent or weakened parts. Replace and discard worn components immediately.

Inspect and maintain rope grabs according to manufacturer's instructions.

Material Hoisting

Material Handling Hoist Kit

Used for material lifting, capable of limitless height, the material hoist kit is a consistent, code-compliant method for using existing rental fleet hoists in material lifting applications.

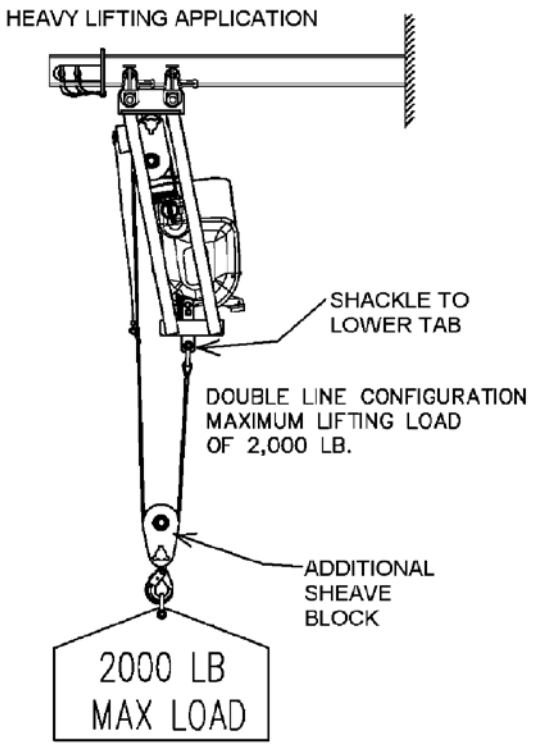
Key Features:

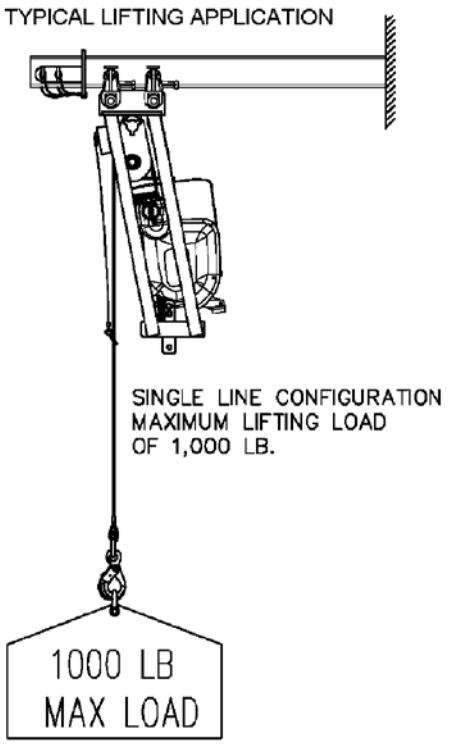
- System includes the material hoist frame assembly and the material hoist electrical set
- Trolley type or fixed connection
- Wire rope guide for trailing wire rope
- Upper limit switch
- Electrical set with emergency stop and power-loss reset
- Tagline connection
- Remote pendant control
- Various rigging methods
- End stop for 5 x 5 beam
- Standard equipment and method for material lifting applications
- Can be used for stand-alone applicatons or in combination with stage applications
- Used with SC1000/SC1500, ZMAC/1000® and other brand electric traction hoists.
- Allows use of traction hoists with no modifications to the hoists, no disabling of safety features or relabeling required.
- Complies with OSHA 1926.552, ANSI A10.5 and ASME B30.16
- Patent Pending

Specifications:	
Capacity:	1,000 lb (453.6 kg) or 2,000 lb (907.2 kg)
Speed:	35 ft/min (10.7 m/min) for 1,000 lb (453.6 kg) capacity 17.5 ft/min (5.3 m/min) for 2,000 lb (907.2 kg) capacity
Frame Weight:	39 lb (17.7 kg)

System Components:
702058-2 Material Hoist Kit Frame
702064-1 Material Hoist Electrical Set
702067-1 End Stop Assembly
8-0278* Adapter, Hoist 90 Degree, Fasteners included
702062-1** Limit Switch, Material Hoist
702070-1** Sheave Tailboard Block

*If using ZMAC/1000® hoist
**If using in Heavy Lifting Application





See our Insulation and Welding Accessories on page 135.

Why Does Code Compliance Matter?

OSHA 1926.552(b)8 requires "All material hoists shall conform to the requirements of ANSI A10.5, Safety Requirements for Material Hoists."

ANSI A10.5 Sect 15.24 requires a power failure disconnect that automatically disconnects all motors from line upon power failure and does not permit any motor to be restarted until manually reset.

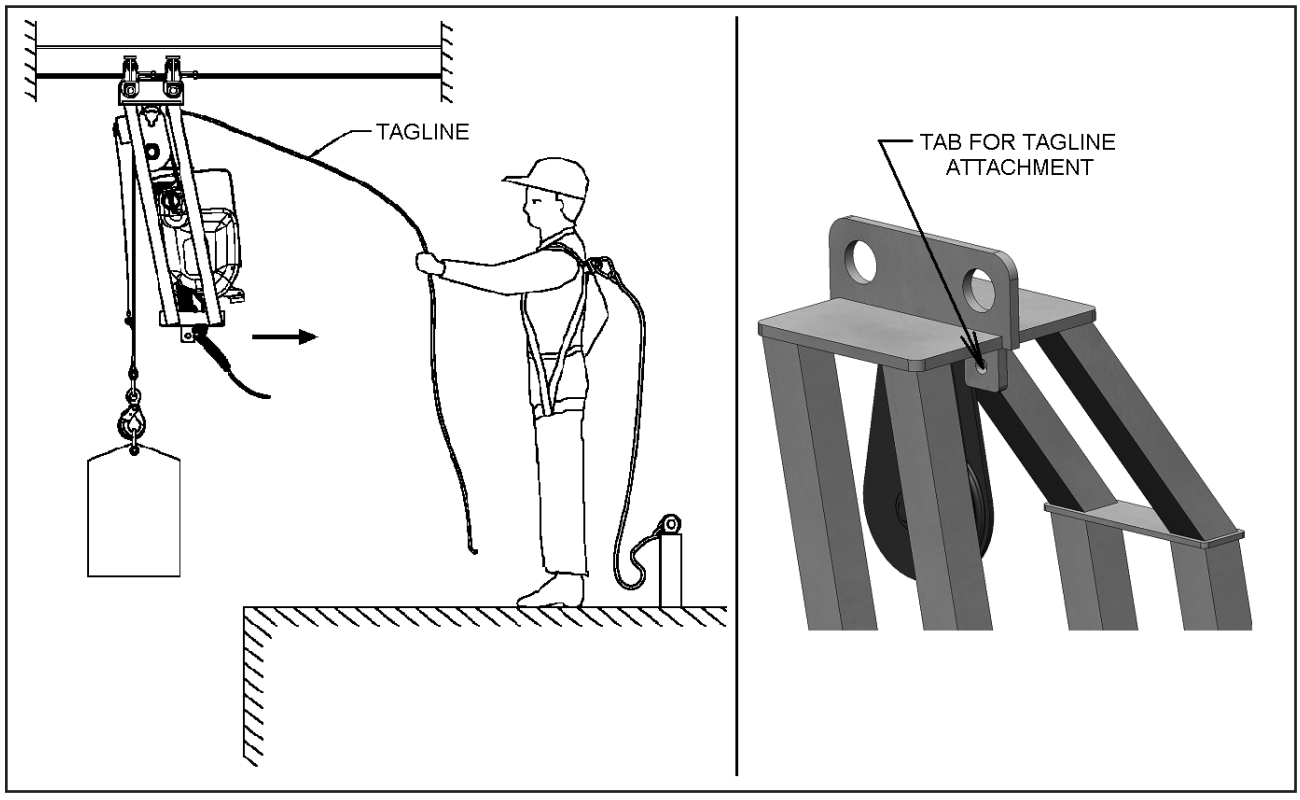
√ Satisfied by the power-loss reset switch on the electrical set. This prevents the hoist from inadvertently beginning running if power is restored unexpectedly.

ANSI A10.5 Sect 19.1 requires a position indicator, defined as positive system, to indicate when load has reached specific position.

√ Satisfied by upper limit switch. This prevents load from being inadvertently run up into the bottom of the hoist.

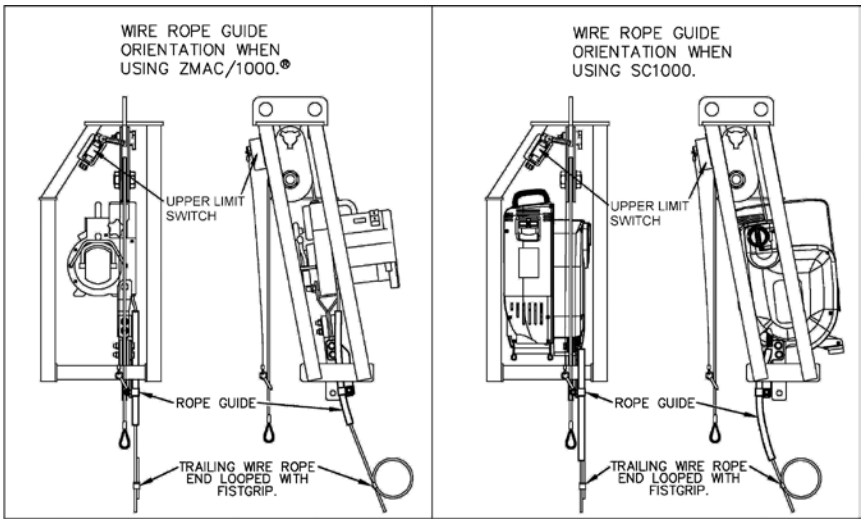
ANSI A10.5 Sect 20.4 requires an emergency electrical cutoff– a means within reach of the operator to cut off the electrical power to the hoist.

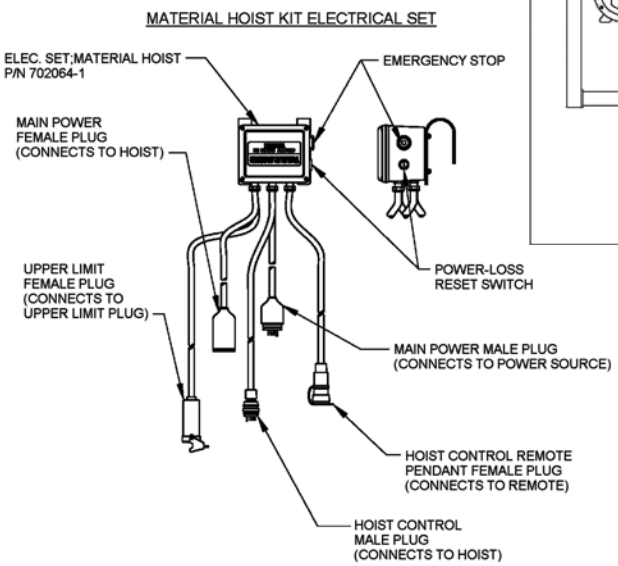
√ Satisfied by Emergency Stop (E-Stop) on the electrical set. In the case of a hoist malfunction, the operator can cut off source power to the hoist quickly.



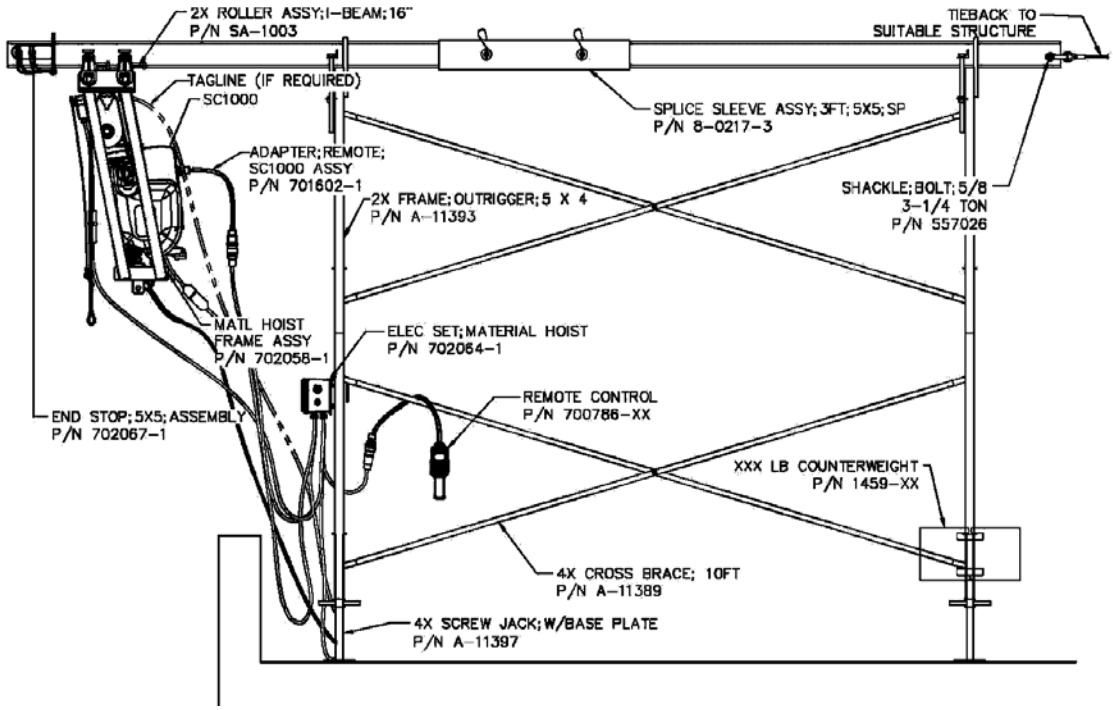
For more Spider material handling projects, contact your Spider professional

Material Handling Hoist Kit
(continued)





Typical Material Hoist Configuration Set-Up



Beta Max Material Hoists

NEW

Spider is an exclusive distribution partner for Beta Max material hoists. We now rent, sell, and service Beta Max portable wire rope material hoists & accessories in our 24 locations to simplify safe, reliable work at height. Beta Max makes confined and hard to reach spaces easy with their portable hoists. Control your work flow, schedule and budget with the most efficient and safe material delivery to any work level. Choose the model that meets your project needs.

Gemini Plus (510002 & 510003)

	Single Line	Double Line
Lift Capacity	600 lb (272.2 kg)	1,200 lb (544.3 kg)
Lift Speed	80 ft/min. (24.4 m/min.)	40 ft/min. (12.2 m/min.)
Lift Height	220 ft (67.1 m)	110 ft (33.5 m)
A/C Power	110V, 20 Amp, 1 or 220V, 12 Amp, 1	
Horsepower	1.5 HP	
Mounting Options	Fixed I-Beam, I-Beam Trolley, Scaff Trac, Trestle Monorail	

- Hoist of choice for medium duty projects
- Largest 120V Beta Max hoist on the market
- Installs easily on existing scaffold systems, work platforms, I-beams and rooftop mounting options
- Flexible I-beam mounting option works with and configures to each unique jobsite
- Maximum safety and efficient alternative to rope and pulley systems, cranes and forklifts
- Long lasting performance with minimum maintenance required

LEO / LEO XXL (510004 & 707918-1)

	Single Line	Double Line
Lift Capacity	1,000 lb (453.6 kg)	2,000 lb (907.2 kg)
Lift Speed	80 ft/min. (24.4 m/min.)	40 ft/min. (12.2 m/min.)
Lift Height		
LEO	220 ft (67.1 m)	110 ft (33.5 m)
LEO XXL	400 ft (121.9 m)	200 ft (61 m)
A/C Power	220V, 13 Amp, 1 or 220V, 15 Amp, 3 *Cannot be field converted	
Horsepower	1 Phase: 2 HP, 3 Phase: 3.3 HP	
Mounting Options	Scaff Trac, Trestle Monorail, I-Beam Trolley, Fixed I-Beam	

- Hoist of choice for heavy-duty, high lift projects
- Long lasting performance with minimum maintenance required
- Maximum safety and efficient alternative to rope and pulley systems, cranes and forklifts
- Installs easily on existing scaffold systems, work platforms, I-beams and rooftop mounting options
- Optional Scaff-Trac Mounting System provides a standardized and complete lifting solution engineered for easy installation every time
- Flexible I-beam mounting option works with and configures to each unique jobsite

Beta Max Material Hoists
(continued)

NEW

LEO / LEO XXL VFD (707939-1 & 707940-1)

	Single Line	Double Line
Lift Capacity	1,000 lb (453.6 kg)	2,000 lb (907.2 kg)
Lift Speed	80 ft/min. (24.4 m/min.)	40 ft/min. (12.2 m/min.)
Lift Height		
LEO	220 ft (67.1 m)	110 ft (33.5 m)
LEO XXL	400 ft (121.9 m)	200 ft (61 m)
A/C Power	230V - 13 Amp	
Horsepower	1 Phase: 2 HP, 3 Phase: 3.3 HP	
Mounting Options	Scaff Trac, Trestle Monorail, I-Beam Trolley, Fixed I-Beam	

- Hoist of choice for glazing, masonry, demolition, construction and restoration companies
- Ideal for precision placement of delicate materials
- Variable frequency drive allows for smooth acceleration and deceleration of hoist at approximately 10 ft/sec (3.1 m/sec)
- Second operating speed graduates at approximately 80 ft/min (24.4 m/min)
- PLC allows three phase motor to operate on single phase power
- Optional Scaff-Trac Mounting System provides a standardized and complete lifting solution engineered for easy installation every time
- Flexible I-beam mounting option works with and configures to each unique jobsite
- Hoist only (707919-1)

New Yorker (510007)

	Single Line
Lift Capacity	600 lb (272.2 kg)
Lift Speed	80 ft/min. (24.4 m/min.)
Lift Height	350 ft (106.7 m)
A/C Power	220V, 13 Amp, 1
Horsepower	1.5 HP
Mounting Options	Fixed I-Beam, I-Beam Trolley, Scaff Trac, Trestle Monorail, Mac-Trac

- Perfect for high reach, medium-duty projects
- Long lasting performance with minimum maintenance required
- Optional Scaff-Trac Mounting System provides a standardized and complete lifting solution engineered for easy installation every time
- Maximum safety and efficient alternative to rope and pulley systems, cranes and forklifts
- Installs easily on existing scaffold systems, work platforms, I-beams and rooftop mounting options
- Flexible I-beam mounting option works with and configures to each unique jobsite

Scorpio (707917-1)

	Single Line
Lift Capacity	400 lb (181.4 kg)
Lift Speed	80 ft/min. (24.4 m/min.)
Lift Height	
Scorpio Plus	80 ft (24.4 m)
Scorpio Plus XL	160 ft (48.8 m)
A/C Power	120V - 15 Amp / 110V - 15 Amp, 1
Horsepower	1 HP
Mounting Options	I-Beam Trolley, Mac-Trac, Scaff-Trac, Trestle Monorail, Vertical Post

- Perfect for lightweight, smaller projects in confined spaces
- Very mobile on a jobsite due to super light 95 lb (43.1 kg) weight
- Optional Vertical Post Mounting System easily attaches to the leg of scaffolding and pivots 180°, allowing convenient loading and unloading of materials at any work level
- Maximum safety and efficient alternative to rope and pulley systems, cranes and forklifts
- Installs easily on existing scaffold systems, work platforms, I-beams and rooftop mounting options

Beta Max Mounting Options

NEW

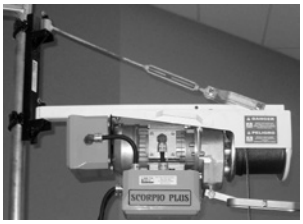
Trestle Monorail

- Perfect for heavy-duty projects featuring a 1,200 lb (544.3 kg) and 2,000 lb (907.2 kg) capacity
- Trestle Monorail is a free-standing A-frame that is ideal for jobsites where scaffolding is not available
- Installs easily between floors and rooftops with no special tools required
- Customize this mounting system for use on mast climbing platforms
- Counterweight clamp assembly installs easily, accommodates standard 50 lb (22.7 kg) staging weights and provides complete system counterbalance

Scaff-Trac

- Complete scaffold lifting solution engineered for easy installation every time. No special tools required.
- Optional extensions provide unlimited system length for ease of material delivery through multiple scaffold bays
- Materials are always within easy reach with a 3.5 ft (1.1 m) cantilever for 7 ft (2.1 m) spaced scaffolding and 2.5 ft (0.8 m) cantilever on 8 ft (2.4 m) spaced scaffolding
- Customize this mounting system for use on mast climbing platforms
- Counterweight clamp assembly installs easily, accommodates standard 50 lb (22.7 kg) staging weights and provides complete system counterbalance
- Special saddles are available for mounting to continuous climbing scaffolding
- 11.5 ft (3.5 m) long monorail gives you the ability to roll materials inside scaffolding bay for added accessibility of material delivery

Post Mount



- Perfect for lightweight, smaller projects in confined spaces
- Sliding trolley top for the Beta Lite hoist provides 5 ft (1.5 m) cantilever for greater reach off of the scaffold frame
- Material delivery made easy with mount engineered to pivot 180° allowing for convenient unloading at work level
- Installs easily on existing standard scaffolding with no special tools required
- Counterweight clamp assembly helps balance overall weight distribution, installs easily and accommodates your weights

I-Beam Trolley

- Material delivery made easy with I-beam trolley that moves along the full length of the beam
- Customize forward and backward cantilever to your unique jobsite requirements
- Adjustable flange widths of 2.66 ft (0.8 m) – 5.25 ft (1.6 m) allow trolley to attach to standard I-beams, allowing for easy installation on any jobsite
- Perfect for heavy duty projects
- Suspension brackets allow you to install your own I-beam to existing scaffolding anywhere on the jobsite
- Counterweight clamp assembly helps balance overall weight distribution, installs easily and accommodates your weights

Fixed I-Beam

- Fixed I-beam option firmly holds the hoist stationery. Perfect for moving materials in confined spaces like the interior of scaffolding or an elevator shaft.
- Fixed I-beam top is compatible with I-beams with a flange width of 2.66 ft (0.8 m) – 5.25 ft (1.6 m).

All Beta Max mounting systems can be tailored to your jobsite specifications.

Beta Max Rigging Accessories

NEW

Double Rope Kit (510106)

A rugged pulley and hook assembly for units with double rope capabilities

I-Beam Suspension Bracket (707942-1U)

Steel plate with saddle and pins to grab flange of I-Beam and hang it under horizontal member of scaffold frame

Counterweight Clamp Set (510020U & 510052U)

Steel brackets that attach to vertical pipe and hold 50 lb (22.7 kg) suspended staging weights to provide counterweight to the hoist and load being lifted

510020U contains swivel clamps for use on round 2 in. (51 mm)
510052U contains swivel clamps for use on square 2.5 in. (64 mm)

Beta Max Carrying Accessories

NEW

Block Fork (510016)

For lifting 8 in. x 8 in. x 16 in. (203 mm x 203 mm x 406 mm) blocks

Specifications	510016
Lifting Capacity:	800 lb (362.9 kg)
Dimensions:	24.5 in. x 24.5 in. x 34.5 in. (622 mm x 622 mm x 876 mm)

Scaffold Frame Fork (510026)

Holds 10 scaffold frames

Specifications	510026
Lifting Capacity:	600 lb (272.2 kg)
Dimensions:	36.25 in. x 15 in. x 25 in. (921 mm x 381 mm x 635 mm)

MATERIAL HOISTING

Basket (510173 & 510174)

Spreader bar not included. See spreader bars 510029 & 510030 on page 183.
Standard duty and heavy duty capacities available

Specifications	510173	510174
Lifting Capacity:	400 lb (181.4 kg)	800 lb (362.9 kg)
Dimensions:	30 in. x 20 in. x 12 in. (762 mm x 508 mm x 305 mm)	36 in. x 36 in. x 18 in. (914 mm x 914 mm x 457 mm)

Brick Fork (510015)

Holds 2.5 in. x 3 in. x 8 in. (64 mm x 76 mm x 203 mm) bricks.
Designed to hold 100-pack of bricks.

Specifications	510015
Lifting Capacity:	400 lb (181.4 kg)
Dimensions:	29.25 in. x 7.5 in. x 37.5 in (743 mm x 191 mm x 953 mm)

Additional accessories are available for all your material handling needs. Call Spider at 877-774-3370.

Dumpster Bucket (510033, 510034, 510032)

Easy to empty, bucket swivels 360º and comes in three sizes: 24, 31 and 40 gallon capacities.

Specifications	510033	510034	510032
Lifting Capacity:	24 gal	31 gal	40 gal

Spreader Bar (510029 & 510030)

Use with slings to carry piping or cross-braces. Sold with Beta Max mud tub and equipment basket.

Specifications	510029	510030
Lifting Capacity:	400 lb (181.4 kg)	800 lb (362.9 kg)
Dimensions:	32 in. (813 mm)	40 in. (1,016 mm)

Mud Tub (510031 & 510175)

Available in two sizes.

Specifications	510031	510175
Lifting Capacity:	950 lb (430.9 kg) 6 yd^3	1,400 lb (635 kg) 9 yd^3
Dimensions:	42 in. x 27 in. x 18 in. (1,067 mm x 686 mm x 457 mm)	42 in. x 27 in. x 28 in. (1,067 mm x 686 mm x 711 mm)

Wheelbarrow Sling (707959-1)

Heavy duty 800 lb (362.9 kg) capacity sling. Fits standard wheelbarrows.

Specifications	707959-1
Lifting Capacity:	800 lb (362.9 kg)

Additional accessories are available for all your material handling needs. Call Spider at 877-774-3370.

Wind Access

Spider works on wind turbines globally.

You get the work. We'll get you there.

Modular, Simple, Stable

Spider's range of solutions puts workers on the blade surfaces for the full scope of work performed at height. From single point inspection systems to 360° access platforms to specialized custom designs, Spider has the modular components, ease of supply and transportability, engineering expertise and installation know-how to get the repair work done productively.

Modular platforms help your investment go farther:

- Easy to transport
- Universal solution
- Reconfigure for blade inspection or tower access
- Minimal crew required to operate
- Available for rent/sale and aftermarket support in 24 locations in the Americas
- US-made and sourced, easy spares and aftermarket support
- Simple operation and safety features, to improve productivity and reduce downtime
- May not require DOT reporting to transport

Blade Access Platform (BAP)

For blade inspection and repair operations, suspended platforms offer a safe, productive, and cost-effective alternative to cranes, ground-based lifts and rope access solutions.

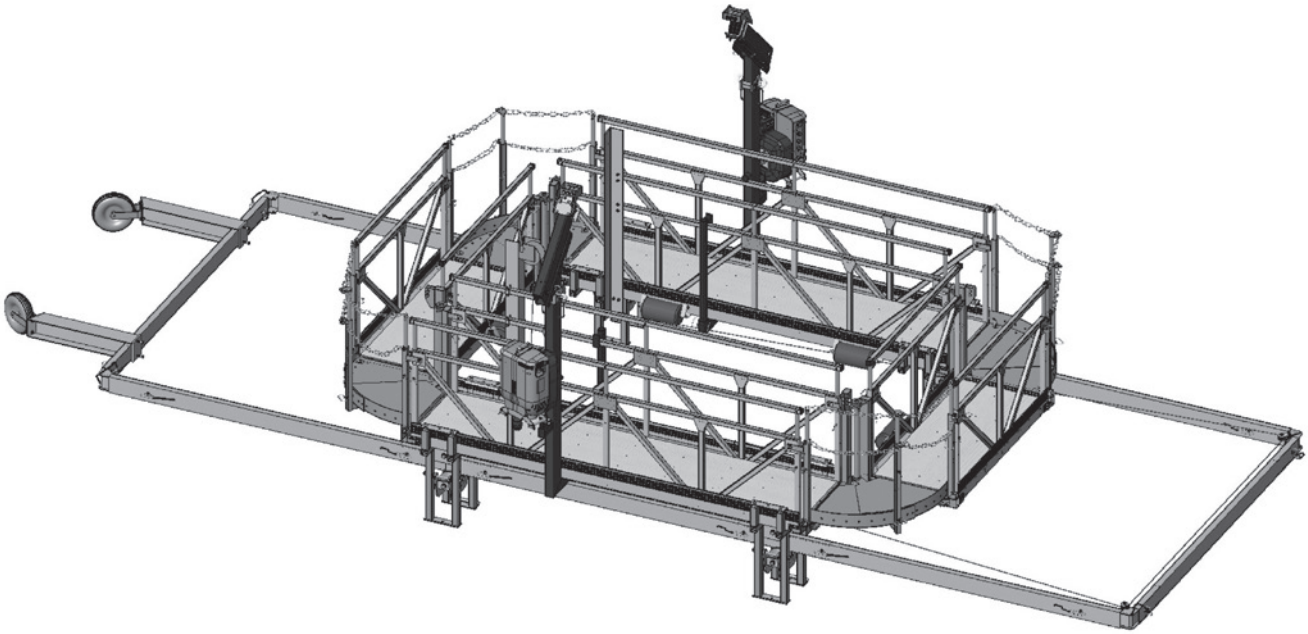
Tower Access Platform (TAP)

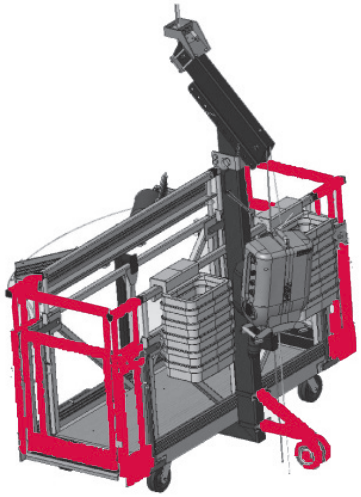
We expertly rig platforms and manage equipment moves around the tower. Spider can provide platform operators, keeping your skilled professionals focused on their trade.

"We love how modular the 360 BAP is. Our composite techs were very impressed with the speed in which it assembled on the ground. In just 2 hours we were able to assemble and rig, and within 8 minutes we left the ground and were able to capture the blade. In my experience, no other access method - whether a crane, rope access or man lift - could have done the job quicker, more cost effectively and as safely."

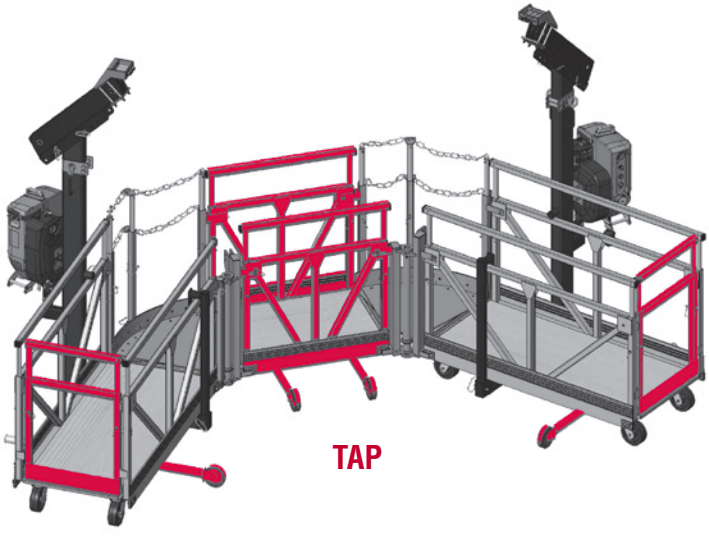
- Jim Lankford,
Owner & President
Lankford Painting Company

If you have the 360° BAP convert it into a 5 ft BAP, 6.7 ft BAP or TAP in moments

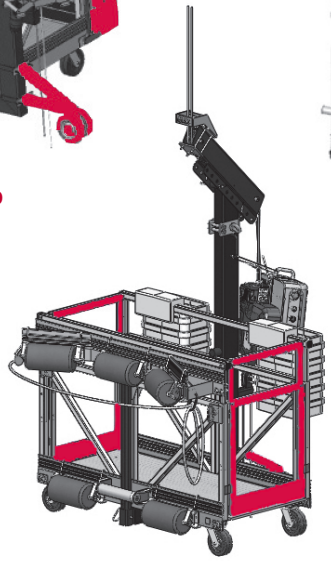




6.7 ft BAP



TAP



5 ft BAP

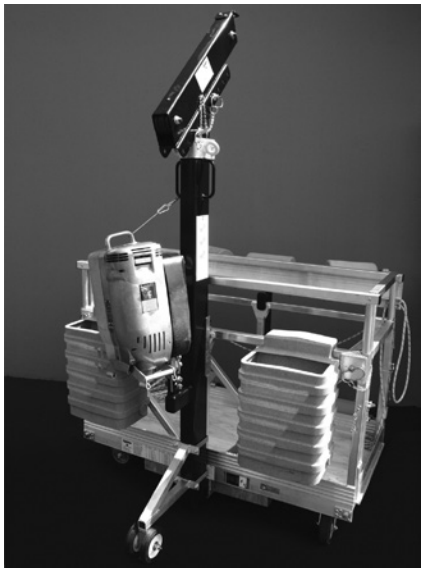
Simple Modular Construction is configurable to various tower or blade repair scopes by simply adding the highlighted items

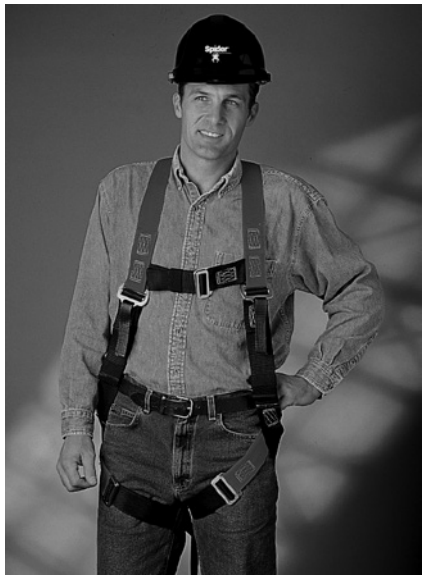
Reconfigurable

5 ft (1.5 m) Blade Access Platform

Specifications:	
Platform Capacity:	750 lb max* (340.2 kg) (live load)
Platform Weight:	600 lb min (272.2 kg) (dead load)
Platform Dimensions:	5 ft L x 2 ft 5 3/8 in. W x 2 ft 7 in. – 3 ft 9 in. (variable) H (1.5 m L x 0.75 m W x 0.8-1.1 m (variable) H)
Handrail Height:	Max. 42 in. (1.1 m) above floorboards Min. 31 in. (0.8 m)

*Canadian platforms use alternate load ratings. The NEW Astro 1500 hoist has been developed to meet these Canadian requirements. See page 37 for details.





6.7 ft (2 m) Blade Access Platform

Specifications:	
Platform Capacity:	772 lb max* (350.2 kg) (live load)
Platform Weight:	1,481 lb min (671.8 kg) (dead load)
Platform Dimensions:	6 ft 8 in. L x 4 ft 8 in. W x 7 ft 11 in. H (2 m L x 1.4 m W x 2.4 m H)
Handrail Height:	Max. 42 in. (1.1 m) above floorboards Min. 31 in. (0.8 m)

*Canadian platforms use alternate load ratings. The NEW Astro 1500 hoist has been developed to meet these Canadian requirements. See page 37 for details.

Use the NEW 706131-1 10 in. Mini-mod Section to create a 6.7 ft (2 m) single line BAP.

7 ft (2.1 m) Blade Access Platform

Specifications:	
Platform Capacity:	750 lb max* (340.2 kg) (live load)
Platform Weight:	628 lb min. (272.2 kg) (dead load)
Platform Dimensions:	7 ft L x 2 ft 5 3/8 in. W x 2 ft 7 in. - 3 ft in. (variable) H (2.1 m L x 0.75 m W x 0.8 m (variable) H)
Handrail Height:	Max 42 in. (1.1 m) above floor boards Min. 31 in. (0.8 m)

* Canadian platforms use alternate load ratings. The NEW Astro 1500 hoist has been developed to meet these Canadian requirements. See page 37 for details.

Tower Access Platform

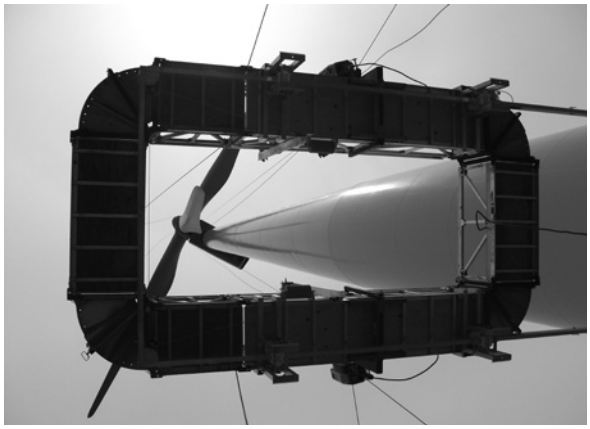
Specifications:	
Platform Capacity:	1,494 lb max* (677.7 kg) (live load)
Platform Weight:	1,506 lb min (683.1 kg) (dead load)
Platform Dimensions:	5 ft L x 3 ft W x 5 ft H (1.5 m L x 1 m W x 1.5 m H)
Handrail Height:	Max. 42 in. (1.1 m) above floorboards Min. 31 in. (0.8 m)

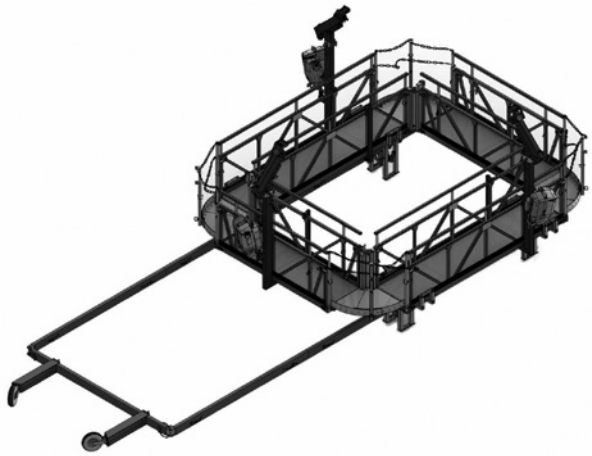
*Canadian platforms use alternate load ratings. The NEW Astro 1500 hoist has been developed to meet these Canadian requirements. See page 37 for details.

360° Blade Access Platform

Specifications:	Standard Platform Sections: 5 x 10 Subframe: 27 ft (8.2 m)	Additional Configurations Platform Sections: 5 x 10, 6 x 10, 7 x 10, 6 x 11, 7 x 12, 7 x 14, 7 x 15 Subframe: 27 ft (8.2 m), 31 ft (9.5 m), 42 ft (12.8 m)
Platform Capacity:	720 lb max* (326.6 kg) (live load)	500 lb - 1,000 lb* (228 kg - 454 kg) (live load) Dependent on platform configuration and number of hoists
Platform Weight:	2,210 lb min (1,002 kg)	2,210 lb - 3,500 lb (1,002 kg - 1,587 kg) Dependent on platform size, sub frame size, and number of hoists
Platform Dimensions:	10 ft 9 3/16 in. x 13 ft outside (3.3 m x 4.1 m)	10 ft 9 3/16 in. x 13 ft - 12 ft 9 3/16 in. x 17 ft outside (3.3 m x 4.1 m - 3.9 m x 5.2 m)
Standard Opening to receive blade:	10 ft 2 in. x 5 ft 10 in. (3.1 m x 1.8 m)	10 ft 2 in. x 5 ft 10 in. - 17 ft 2 in. x 7 ft 10 in. (3.1 m x 1.8 m - 5.2 m x 2.4 m)
Total Platform Height:	9 ft 2 in. (2.8 m)	9 ft 2 in. (2.8 m)
Minimum Blade to Tower Distance:	3 ft 7 in. (1.1 m) Dimensions vary with configuration selected	Dimensions vary with configuration selected
Handrail Height:	Max. 42 in. (1.1 m) above floorboards Min. 31 in. (0.8 m)	Max. 42 in. (1.1 m) above floorboards Min. 31 in. (0.8 m)

*Canadian platforms use alternate ratings. The NEW Astro 1500 hoist has been developed to meet these Canadian requirements. See page 37 for details.





Watch the 360° BAP in action at
http://www.spiderstaging.com/wind/Videos/360BAP/bladeAccess.html

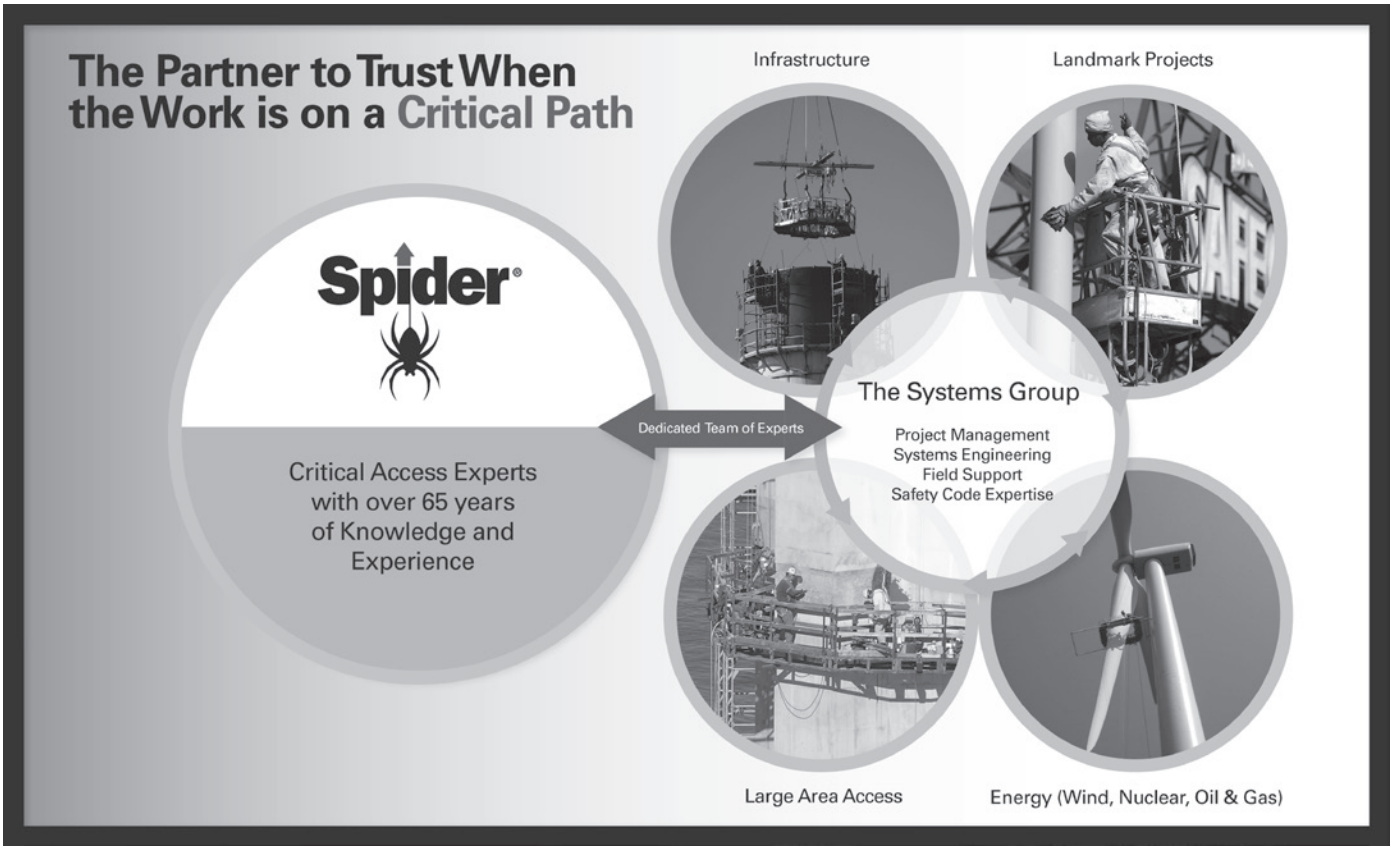
Notes

Service Expertise

Spider Systems Group

NEW

This dedicated service team meets the unique needs and challenges of large industrial and commercial project work. The group works in concert with the extensive Spider branch network to provide access and fall protection solutions for the complicated, mission-critical projects. It is resourced to deliver the response time, site support, project management and innovative solutions that the most critical energy, infrastructure and landmark project teams demand. With over 65 years of industry knowledge along with the combined experience of seasoned industry veterans, Spider's Systems Group is ready to partner with you.



SERVICE EXPERTISE

Case Study 1: Waterproofing

Marseilles Apartments, Section 8 Housing - New York City, NY

Contractor: BSK Restoration

Project Scope:
Install waterproofing and ice shield protection to the building's exterior

Challenges:
The older, historical building style with a steeply pitched roof posed several access problems:

- It was not possible to position outrigger beams on any portion of the pitched roof.
- The distance between the parapet wall and the edge of the roof was in excess of 13 ft (4 m).
- The pitch on the corners of this building also wrapped the ends of the building, preventing access from 15 ft (4.6 m) of each end of the building.

Solution:
Spider engineered two modular platforms 51 ft (15.5 m) long with 15 ft (4.6 m) of cantilever and walk through stirrups to overcome the access challenges. The platforms were powered by four SC1000 traction hoists with pendants.

Spider's New York team set the customer's mind at ease by helping them file the drawings and cantilever charts with the NYC DOB to secure their permits and being on-site to set up the equipment and ensure the contractors were comfortable with the operation.

Spider's cantilevered solution enabled BSK Restoration to complete their project on time and within budget, compared to their only other viable option of pipe scaffolding which was expected to extend the project an additional 4-6 months.

Check out the products featured in this case study:

Modular Platforms - pages 70-71
Walk Thru Stirrup Assy - page 73
SC1000 Hoist - pages 26-32

Case Study 2: Glass Installation

Revolution Tower - Panama City, Panama

Contractors: Estructuras Y Remodelaciones

Project Scope:
Glass installation on both the vertical face and the underside of 48 projecting floor levels.

Challenges:
- The only level landing surface existed at the 15th floor level.
- The spiral configuration did not allow lowering the platform more than 2 stories from each rigging point and demanded that vertical moves be carried out with the use of transfer wires. Additionally, once the windows were installed at level, outriggers could no longer be installed at that level.
- The contractor required a successful on-site trial run of Spider's innovative, labor-intensive rigging plan.
- Budget constraints did not allow for custom equipment design.
- The tight 4-month project left little margin of error for delays.

Solution:
In addition to ST-180 Electric Spider work baskets already in customer's fleet, Spider rented a 40 ft (12.2 m) platform powered by two SC1000 electric hoists and equipped with two outrigger beams positioned one floor above the working floor level. A transfer wire was connected to the platform via a cross beam to facilitate moving from the underside area of the floor to the next vertical face. Spider trained the operators to transfer the hoists to the new suspension points in mid-air to move the platform into the next working position. The operators made a total of 192 mid-air transfers – 4 upward runs of the platform were required with 48 transfers per run.

Few projects ever require this quantity of mid-air transfer of a 40 ft (12.2 m) stage onto new suspension wires. Spider was onsite for the training and then the operators took over. Performing 192 mid-air transfers safely and without incident under time-pressured conditions demonstrates the quality of Spider's training and our equipment, as well as the caliber of Estructuras y Remodelaciones' project execution team.

Check out the products featured in this case study:

ST-180 Electric Spider - pages 54-55
Modular Platforms - pages 70-71
SC1000 Hoist - pages 26-32
Outrigger Beams - pages 94-95

Case Study 3: Curtain Wall Installation

The Cosmopolitan Resort Casino - Las Vegas, NV

Contractor: Far East Aluminum

Project Scope:
Installation of curtain wall and glass on sheer walls

Challenges:

- The type of curtain wall being installed required attachment at both the uppermost and lowermost locations on the panel.
- Initiating curtain wall installation before completion of the roof required upper floor rigging positions.
- Frequent moves of the rigging position and tight project timelines required a fast rigging method for sheer walls.

Solution:
5 double-deck platforms, varying from 25 ft (7.6 m) to 30 ft (9.1 m) long, powered by SC1500 and SC40 traction hoists; sheer wall brackets with double eyes; 16 ft (4.9 m) beam sets rigged with post shores to eliminate counterweights.

3 double-tier platforms installing curtain wall system

Check out the products featured in this case study:

Modular Platforms - pages 70-71
SC1500 Hoist - pages 26-32
SC40 Hoist - page 33
Post Shore System - page 107

Case Study 4: Rolling Blind Installation

Vancouver Convention Center - Vancouver, BC Canada

Contractor: PCL Constructors Westcoast, Inc.

Project Scope:
Provide access for the installation of rolling blinds above escalator.

Challenges:

- Extremely tight timeframe required to minimize impact on guests staying at the convention center
- No power on site for electric hoists
- Structural conditions made it difficult to access rigging points for the swingstage
- Glass panels and a decorative wood ceiling demanded a safe yet delicate solution

Solution:
A 31 ft (9.5 m) platform powered by manual hoists was installed and rigged on a Saturday morning and dismantled just three days later with no disruption to the busy convention center's guests. Prior to rigging, wood planking was installed to create a walkway to access structural supports. After Spider's swift mobilization, the contractor was able to get to work the same day.

Spider's solution saved PCL over $2,500 off their original budget, and enabled the work to be completed within the carefully planned timeframe with little to no disruption to the convention center's business.

Check out the product featured in this case study:

Modular Platforms - pages 70-71

Case Study 5: Sign Installation

US Capitol - Washington, DC

Contractor: The Architect of the Capitol (AOC)

Project Scope:
Provide training and access expertise for the installation of the American flags that served as the background for President Obama's 2009 inaugural platform

Challenges:

- The sandstone cornice that had been used for the rigging point for the previous inaugurations was recently deemed insufficient for rigging a stage.
- Extensive security measures were implemented due to the unique nature of this inauguration.

Solution:
Modular platforms powered by SC40 traction hoists provided access to the Capitol's exterior. This equipment was rigged with 5x5 beams supported by Outrigger Beam Support Frames (OBSF) to transfer the load to the roof structure and custom-engineered 36 in. (914 mm) cornice hooks to bypass the sandstone cornice. Hoists were mounted on crossbeam assemblies to allow for adjustments in the spacing between rigging points. AOC workers completed Spider's Competent Person Training course. Spider delivery and rigging personnel passed FBI background checks to access the site and performed more rigorous onsite equipment inspections to ensure safety and security on this sensitive project.

Check out the products featured in this case study:

Modular Platforms - pages 70-71
SC40 Hoist - page 33
Outrigger Beams - pages 94-95
Outrigger Beam Support Frame - page 102
Cross Beam Assembly - page 85
Competent Person Training - pages 216-217

Case Study 6: Stadium Renovations

University of Michigan - Ann Arbor, MI

Contractors: Curtis Glass, Lansing Glass, & Turner Brooks

Project Scope:
Provide access to increase handicap-accessible seating, replace bleachers, widen individual seats and aisles, and add a new press box as well as luxury boxes and club seats to the Wolverine Football Stadium

Challenges:
- Nine degree incline of a wall under renovation required workers to continually pull work stages inward to stay flush to the wall.
- All rigging had to clear the 15 ft (4.6 m) parapet wall.

Solution:
Multiple swing stages and SC1000 hoists – throughout the three year project, Spider was the sole swing stage provider to these three contractors, with up to 10 stages and 20 hoists in action on any given day. Spider's Counterweight Beam Sling (701878-1) eliminated the need to lift weights higher than waist level, saving the contractors significant rigging time and effort. Spider held on-site Competent Person Training for all 35 people who operated the equipment. The versatility of Spider's equipment and on-site training enabled the contractors to complete their work on time, on budget, and more importantly: without incident.

Check out the products featured in this case study:

Modular Platforms - pages 70-71
SC1000 Hoist - pages 26-32
Counterweight Beam Sling - page 103
Competent Person Training - pages 216-217

SERVICE EXPERTISE

Case Study 7: Offshore Access

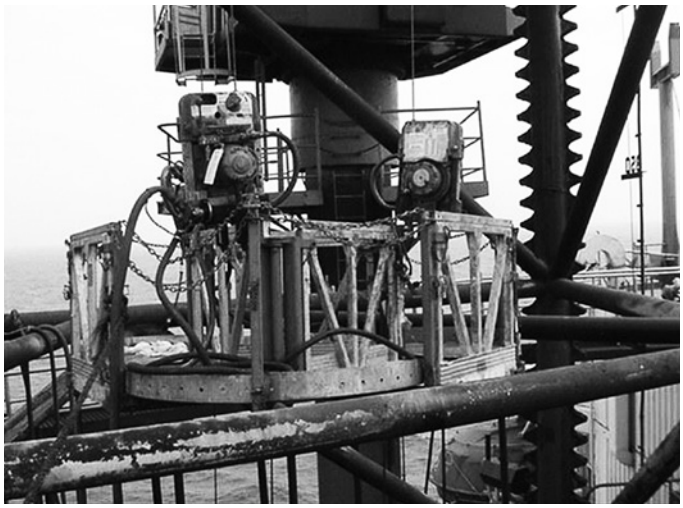
Adriatic IX Triangular Platform - Gulf of Mexico

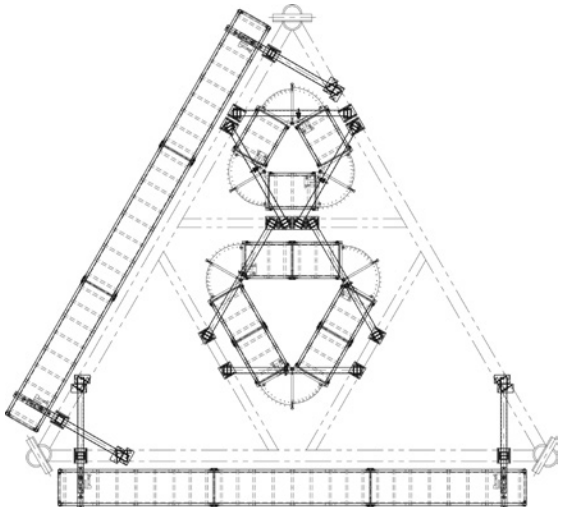
Contractor: Resource Rig Supply, Inc - Houston, TX

Project Scope:
Provide complete access for maneuvering up and down the interior and exterior of a 400 ft (121.9 m) jack up leg on the Adriatic IX offshore drilling rig for offshore repair, blasting and painting.

Challenges:
- Confined areas inside and outside of the legs that support the hull of the rig
- No other means to safely access while keeping the rig in operation.

Solution:
A custom triangular platform to meet the structural needs for the rig's interior and a straight platform for the exterior.





Oil rig access system

Custom engineered solution
Call Spider if your project requires more than standard equipment.

Case Study 8: Bridge Work

Burlington Bristol Bridge – Philadelphia, PA

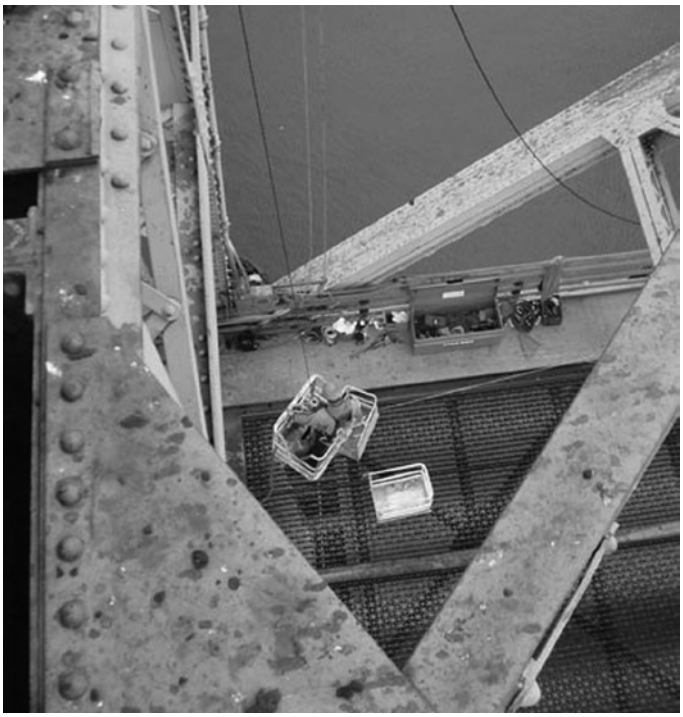
Contractor: Pennoni Associates Inc.

Project Scope:
Renovations to truss bridge's trolley system

Challenges:

- Minimal existing walkways to work points
- Working at height with active roadway and river below
- Swift de-rigging of equipment on bridge's active lift-span required to maintain flow of waterway traffic

Solution:
Spider provided ST-17 Air Spider work baskets, which allowed access to all areas of renovation and required a single rigging point that could be cleared in just fifteen minutes to keep waterway traffic flowing. Flydecks were added to increase the working swath, eliminating repositioning of equipment and saving valuable time. A series of needle beams, fall protection, and a scaffold hand controlled system at the tower's top level also enabled the work to be completed safely and within the customer's time frame.



Check out the products featured in this case study:

ST-17 Air Spider - pages 44-47
Flydecks - page 68

Case Study 9: Bridge Work

Spences Bridge - BC Canada

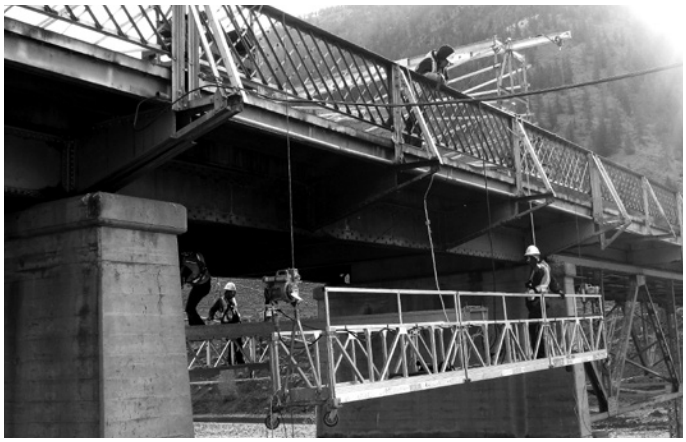
Contractor: Buckland & Taylor, Ltd. – Bridge Engineering

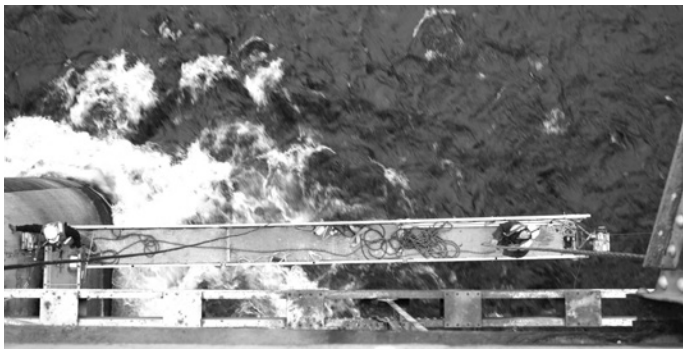
Project Scope:
Provide access for inspection of the entire underside of the 700 ft (213.4 m) bridge including all trusses both longitudinally and across the span. In addition, each pier of the bridge was inspected down to the water level.

Challenges:
- Working over fast flowing river
- Working over and near an active railway
- Extreme weather conditions including high winds, rain, and cold
- No permanent power or lighting supply on bridge
- Severely sloping, rocky terrain on both ends of the bridge making stage building difficult.
- Small time frame to get the project completed. The well-traveled bridge was closed by Canada's Ministry of Transportation for this inspection project, so time was of the essence.

Solution:
With the expertise of four Spider riggers, two 30 ft (9.1 m) modular swing stages powered by 1,000 lb (453.6 kg) hoists were moved across the entire 700 ft (213.4 m) span of the bridge, enabling two on-site engineers to inspect the underside of the bridge and piers. Two rolling Outrigger Beam Support Frame towers were engineered to support both stages simultaneously, and on-site generators powered the stages through the absence of a readily-available power supply.

The project was completed in just 10 days, 4 days ahead of schedule, resulting in a 30% labor reduction and significant onsite savings to the contractor.





Check out the products featured in this case study:

Modular Platforms - pages 70-71
Outrigger Beam Support Frame - page 102

Case Study 10: Bridge Work

CN Rail Second Narrows Swing Bridge - Vancouver, BC Canada

Contractor: Hymach Industries

Owner: Canadian National Railway

Project Scope:
Throughout the projects two month duration Spider provided access for Hymach Industries to service the roller guide wheels for the lift mechanism on the four columns of the bridge towers. The Second Narrows bridge is immediately east of the Lions Gate Bridge and connects North Vancouver to Vancouver over the Burrard Inlet 150 ft (45.7 m) below. This active waterway is manned 24/7 to enable vessel traffic to pass unimpeded through the inlet.

Challenges:
- Because this is an active railway bridge that raises every hour to allow boats to pass underneath, the platform needed to move with the swing bridge and be independent of the main structure.
- This frequent activity also required workers to secure the swingstage and all equipment to the moving bridge section, with just ten minutes notice.
- Confined rigging space posed challenges as well, including limited access, small openings and ladder openings.

Solution:
A 6 ft (1.8 m) knock-down modular platform powered by electric traction hoists provided a lightweight, easily transportable access solution that could pass down through the small access points.

Spider engineered a specialized beam clamp assembly attached to the bridge's moving walkway system to allow the swingstage, which was attached to the walkway, to travel with the swing deck itself on its regular 30 minute raise and lower cycle. This custom system required no backspan, tieback or projection into the active rail lines across the bridge, enabling complete project access with no rail traffic interruption along this busy corridor.

Spider's access professionals performed the initial rigging services and moved the platform to each of the new tower positions as needed. Because safety is key when working at height Spider performed Competent Person Training and an equipment orientation with all individuals who would be using the products prior to the start of the job.

Check out the products featured in this case study:

Modular Platforms - pages 70-71
Competent Person Training - pages 216-217

Case Study 11: Stack Access

Internal Stack & Chimney Access

Contractor: Tampa Electrical Company (TEC)

Project Scope:
Provide access to internal surface of the stack

Challenges:

- Stack bottom was unusually sloped at 45 degree angle and was severely rusted.
- The stack was 300 ft (91.4 m) above grade and the only access to the stack was at elevation 200 ft (61 m) from catwalk.

Solution:
Spider engineered a circular float with custom rigging star, powered by six 1,000 lb. (453.6 kg) hoists and rated for 4,000 lb. (1,814.4 kg) capacity. Spider's solution came in under budget and saved the customer $150,000 compared to built-up scaffolding options.

Custom engineered solution
Call Spider if your project requires more than standard equipment.

Call or click for more information
1-877-774-3370
www.spiderstaging.com

Case Study 12: Stack Access

Oak Grove Power Plant - Waco, TX

Contractor: Hadek Protective Systems BV – a Dutch company doing its first US project ever

Project Scope:
Installation of a Pennguard® ceramic brick liner to a 450 ft (137.2 m) tall stack

Challenges:

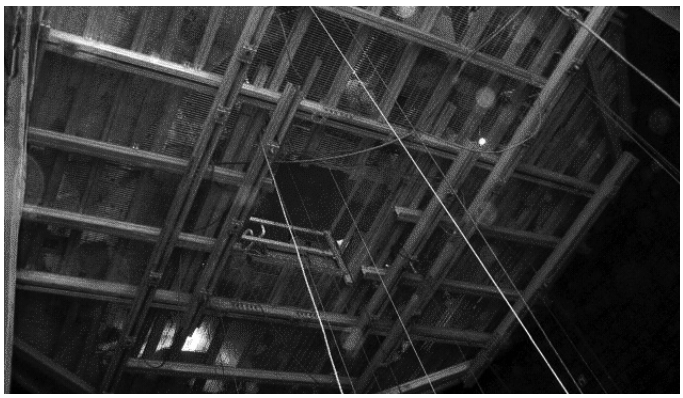
- Providing a platform that was large enough and had enough capacity to provide support and access through all of the stages of work - blasting, cleaning, brick laying, and inspection.
- Contractor new to US safety codes

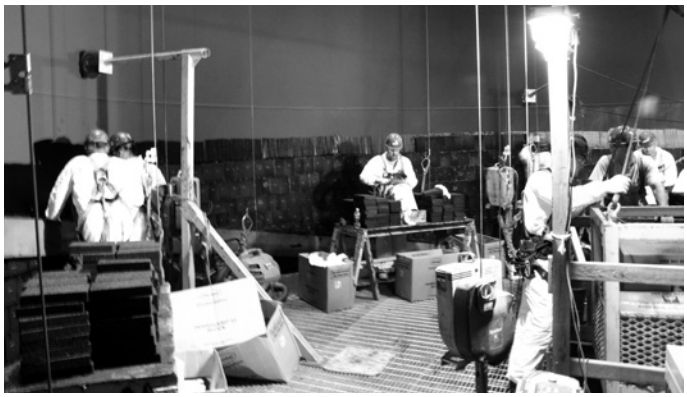
Solution:
Custom engineered 31 ft (9.5 m) round float platform equipped with nine SC-1500 hoists with 13,500 lb (6,123.5 kg) capacity for worker and brick loads. The precise 31 ft (9.5 m) platform diameter put the mason at the lining wall.

The platform was pre-assembled offsite, then broken down, numbered and tagged prior to shipping to the job. Then each piece was hoisted to the 150 ft (45.7 m) level for assembly in the 33 ft (10.1 m) wide stack.

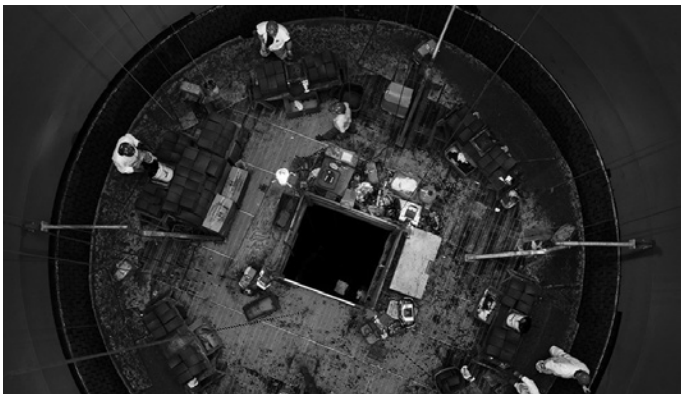
- Grated decking sped up abrasive debris removal during blasting
- Top of stack rigging to attach the 18 suspension wire ropes

A 4 ft (1.2 m) square access hole in the platform's center was designed in to take a work basket from ground level to the elevated platform throughout the work shift. This transit basket brought workers, bricks and the adhesive, which was mixed in small batches for quick application. This critical feature shaved weeks off the production schedule.





Custom engineered solution
Call Spider if your project requires more than standard equipment.



SERVICE EXPERTISE

Case Study 13: Tank Access

Gulf Power/Crist Plant - Pensacola, FL

Contractor: SealTech

Facility Owner: Gulf Power

Project Scope:
Provide access to the jet bubble reactor's upper tank wall and beams for sanding, joint finishing, and joining beams to tank wall, and to beams to install piping for the cooling process

Challenges:
- The fiberglass tank restricted load capacities.
- To minimize effects on the plant's production, quick and efficient installation times were required.

Solution:
Spider's engineering experts designed a circular platform that could be separated into quarters to increase the load capacity. The platform was rigged with corner adapters and Spider's 702396-1 Extended Parapet Clamps. Eight 30 ft (9.1 m) modular platforms powered by SC1000 traction hoists and equipped with 5x5 beams and H-plates were rigged between the reactor's beams.

Superintendents, foremen and key team members completed Spider's Competent Person Training course at the Pensacola Operation Center to ensure safe, efficient operation of the equipment.

Spider's custom engineered design solution saved SealTech six project days for its entire crew due to the ease and efficiency of Spider equipment, compared to the ground-based scaffold solution the company considered.

Check out the products featured in this case study:

Corner Adapters - page 78
Extended Parapet Clamp - page 116
Modular Platforms - pages 70-71
SC1000 Hoist - pages 26-32
Beams - pages 94-95
H-plates - page 99
Competent Person Training - pages 216-217

Case Study 14: Processing Plant Access

ThyssenKrupp USA Steel Processing Plant - Calvert, AL

Contractor: LPR

Facility Owner: ThyssenKrupp USA

Project Scope:
Provide access for the installation of steel girder beams on the 175 ft (53.3 m) wide, 234 ft (71.3 m) tall hot dip galvanizing line structure of the steel processing plant.

Challenge:
- Extremely efficient installation, equipment relocation, and dismantling were required to minimally impact the ThyssenKrupp plant's production.

Solution:
Six 40 ft (12.2 m) platforms powered by electric traction motors, rigged with truss outriggers enabled the contractor to work two columns simultaneously, increasing their productivity. After Spider's swift mobilization, the contractor was able to get to work the same day. The truss outriggers then allowed for quick and easy relocation of the rigging, enabling the workers to move from one drop to the next in just 30 minutes.

Twenty-five LPR employees completed Spider's Basic User Training and mastered the use of Spider's rigging checklist to ensure safe ongoing use of the equipment. LPR demonstrated safe operations that exceeded ThyssenKrupp's facility requirements.

Spider's solution saved LPR over $50,000 and 10 days of set up and tear down time compared with the built-up scaffolding option LPR considered.

Check out the products featured in this case study:

Modular Platforms - pages 70-71
Truss Outriggers - page 118
Training - pages 216-217

Case Study 15: Power Plant Maintenance

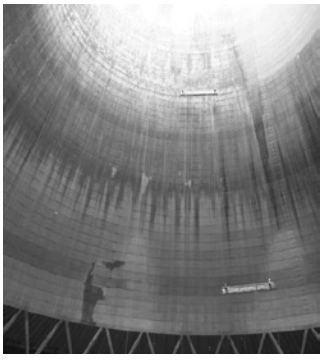
AEP Cardinal Station Unit 3 Cooling Tower - Brilliant, OH

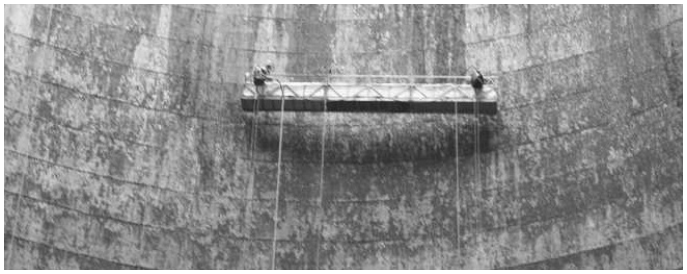
Contractor: Cannon Sline Inc.

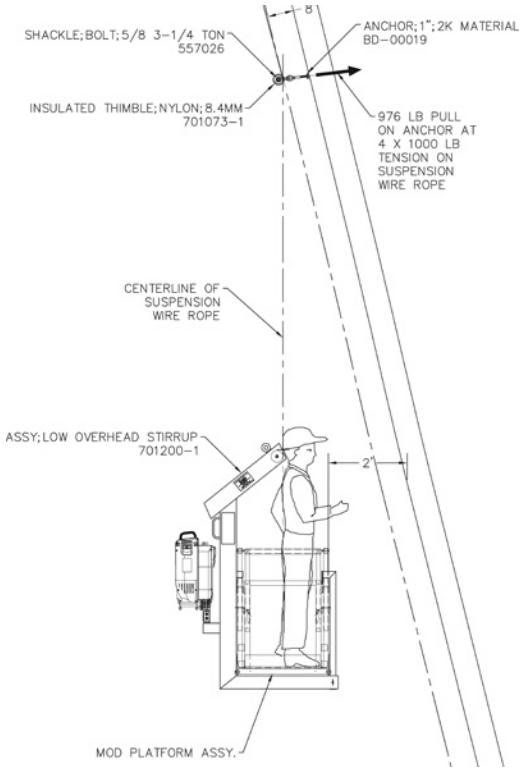
Project Scope:
Inspect, repair and coat entire interior surface of cooling tower with dimensions 200 ft (61 m) in diameter and 424 ft (129.2 m) high

Challenges:
- Required custom parapet clamp to work on sloped surface
- Custom design of a platform that could be pulled in using change of direction sheave to allow platform to follow wall slope
- Required winch system and anchor plan to utilize change of direction sheave
- Design topside rigging system around existing lightning protection
- Ensure system was easy to use and relocate to keep to the 11 week outage schedule

Solution:
Designed and built a custom parapet clamp to work on a sloped parapet wall, a platform utilizing a primary and secondary wire rope system with a horizontal lifeline running the length of the platform, and a winch system and sheave system that allow the platform to follow the sloped contour of the tower walls to give access to the underside of the slope. Incorporated standard rental equipment with customized devices to reduce the overall cost of the project. Completed all design, manufacturing and delivery onsite in five weeks.







Custom engineered solution
Call Spider if your project requires more than standard equipment.

Case Study 16: Nuclear Plant Work

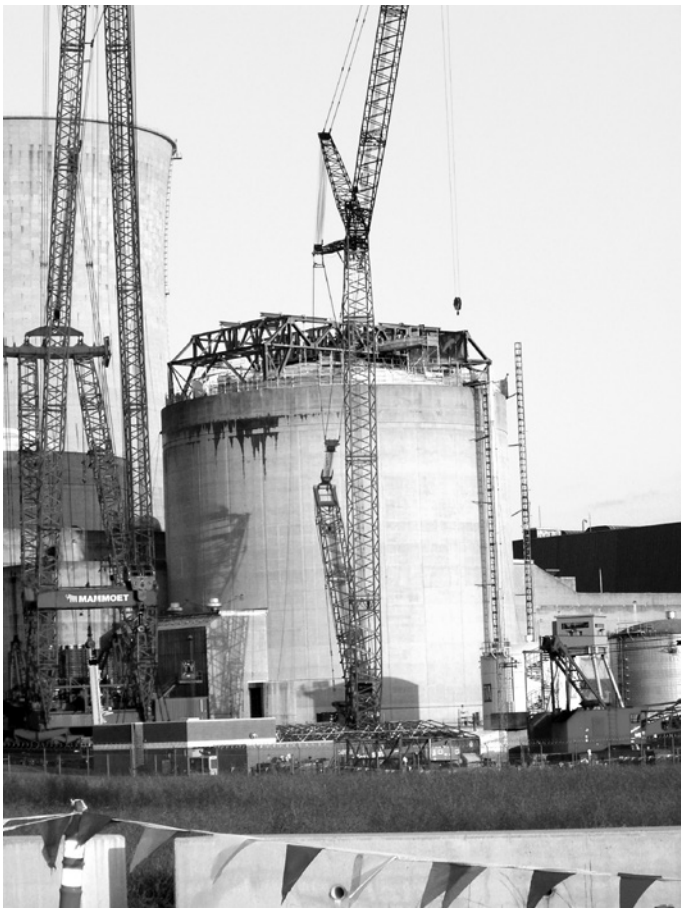
TVA Watts Bar Nuclear Plant - Spring City, TN

Contractor: Bechtel Power Corp.

Project Scope:
Customer needed to remove and replace a section of the steel spray containment vessel and concrete containment vessels to allow the replacement of the steam drum.

Challenge:
- Provide a solution that allowed the contractor to replace and weld the spray containment vessel without causing any obstructions that would affect critical path work or interfere with the use of the polar crane.

Solution:
Custom double wide modular stirrups with modular platform and 220V Zmac/1000® hoists.



Check out the products featured in this case study:

Modular Platforms - pages 70-71
Zmac/1000® Hoist - pages 35-36

Case Study 17: Material Lifting

Eli Roth's Goretorium - Las Vegas, NV

Contractor: Gist Décor working under Forte Construction

Project Scope:
Eli Roth's Goretorium is a haunted chapel on the Las Vegas strip. After couples pronounce their marriage vows, a decorative wall of zombies rises in the background. The contractor required a permanent material hoist to repeatedly lift and lower the 8 ft (2.4 m) x 10 ft (3.1 m), 750 lb (340.2 kg) wall as part of the theatre's production.

Challenge:
- The customer required a discrete, custom mounting solution that blended into the set.

Solution:
Spider sold one Beta Max Leo 220V material hoist and developed the custom mounting solution - a squeeze clamp constructed of steel angle iron and painted black to blend in with the set.

*Due to the nature of the project, photography was not allowed on-site. Shown is the Beta Max Leo material hoist.

Check out the product featured in this case study:

Beta Max Leo 220V Material Hoist - page 177

Case Study 18: Leading Edge Protection

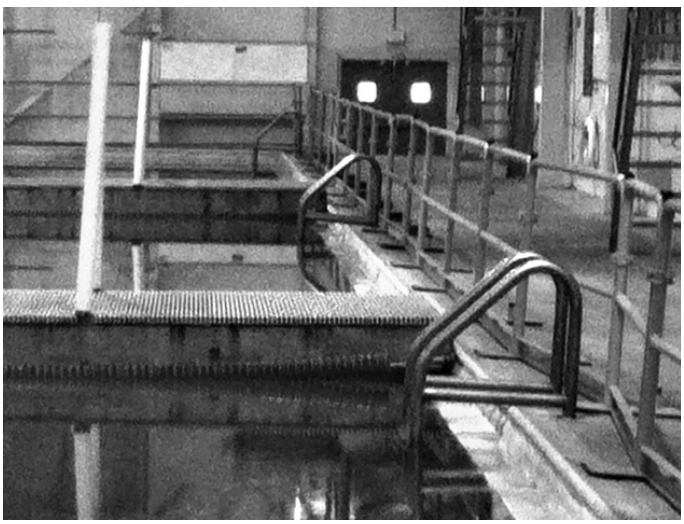
Naval Air Station, Building 3823 Pool & Gym - Pensacola, FL

Contractor: R. L. Burns, Inc.

Project Scope:
The exterior of the pool area needed to be completely secured so that when it was drained for an HVAC system replacement, people on site were protected from injuries or falls into the empty pool.

Challenges:
- Being on board a Navy base, there were strict requirements that the pool area was 100% protected and without mishap.
- They also had a tight 21 day timeline.

Solution:
500 ft (152.4 m) of Spider's NEW SpiderRail™ system



Check out the product featured in this case study:

SpiderRail™ - pages 166-167

Case Study 19: Wind Turbine Access

Hackberry - Albany, TX

Turbine: Siemens 2.3MW

Contractors: Lankford Company Inc.

Project Scope:
Access for blade inspection and repair work for Siemens 2.3 MW turbines

Challenges:
- 360 degree access needed to perform repairs at multiple locations on blade surface
- Extremely hot site conditions for uptower rigging and installation work required more active health monitoring
- Limited time schedule for the work

Solution:
- Spider provided a 5 x 10 ft (1.5 x 3 m) configured 360 Blade Access Platform (BAP) with independent lifeline.
- With Spider's expertise in safety, rigging and training, Lankford Company was able to bring in the 360 BAP closer, could simply adjust to the larger blade tip with the manual winch, and could easily access the blade repair area.
- With the 360 BAP assembled on the ground, workers engaged the blade tip in less than 8 minutes to start the work.
- Storage buckets positioned the workers' tools at waist height for added productivity.
- With both a primary and secondary suspension wire rope to each hoist, the workers were able to attach their fall protection lanyards directly to the engineered PFAS safety anchor device on the walk-thru stirrup. This point is also engineered for use with a descent device, if users choose not to use the hoists' no-power controlled descent system.
- Compared to other equipment options, the Lankford crew was able to get working very quickly.
- Siemens recognized this platform system in its national newsletter for ingenuity in wind farm maintenance.

Check out the product featured in this case study:

360° Blade Access Platform - page 191

Case Study 20: Wind Turbine Access

Costa Rica

Turbine: Neg Micon 750 KW

Contractor: CR Corporation

Project Scope:
Entire blade tip replacement and additional blade repair work on Neg Micon 750 KW turbine

Challenges:
- 360 degree access required with high load rating to support workers and tools
- No rigging points available on the nacelle
- Very short nacelle, making rigging points also very close to the tower
- Small tower with tight clearance
- Remote location in Costa Rica
- Crew unfamiliar with swing stage platforms

Solution:
Spider custom designed the blade access solution to ensure user productivity. The 360 Blade Access Platform (BAP) was powered with three SC1500 hoists allowing faster mobilization and more load capacity. The platform featured an alternative stirrup design to improve platform stabilization and reduce the load on the hoists. In collaboration with CR Corporation, Spider installed engineered slings on the blade root and hub to provide the rigging solution. Spider performed multiple onsite training sessions.

Check out the products featured in this case study:

360° Blade Access Platform - page 191
SC1500 Hoist - pages 26-32

Custom engineered solution
Call Spider if your project requires more than standard equipment.

Case Study 21: Wind Turbine Access

Los Vientos Wind Farm - Lyfor, TX

Contractor: Lankford Company

Project Scope:
Installation of VG rails to blades

Challenge:

- Siemens 108 3.2 MW turbine with an extremely large blade length of 171 ft (52 m) means the point of capture was over 40 ft (12.2 m) from the tower

Solution:
360 Degree Blade Access Platform with special Siemens' steel sub frame, enabling the platform to traverse far enough away from the tower to capture the blade tip. Spider's solution provided better ergonomics, greater safety, and a higher quality final product compared to alternative solutions.

Check out the product featured in this case study:

360° Blade Access Platform - page 191

Competent Person Training

Spider has been a supplier of powered suspended access for over 65 years. We have thousands of companies using our products every day. As regulations and equipment change, the need for an updated curriculum and training program for our customers has become a top priority for our company. To answer this need we offer a Competent Person Training Program.

What is Competent Person Training?

OSHA defines competent person in 29 CFR 1926.450(b) and 1926.32(f) as "one who is capable of identifying existing and predictable hazards in the surroundings or working conditions which are unsanitary, hazardous, or dangerous to employees, and who has authorization to take prompt corrective measures to eliminate them." Spider's Competent Person Training Program is designed to meet the OSHA standards and provides suspended scaffold operations training on hazard awareness and mitigation, fall protection, basic rigging techniques and achieving mitigation of site risks that will allow the employer to deem an individual competent to use suspended scaffolding equipment.

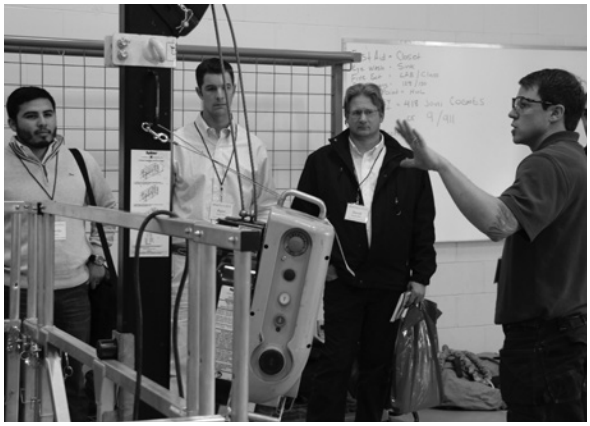
What will the program do for me?

This Spider program, once successfully completed, will allow you as the employer to deem an individual competent to use Spider equipment and meet the standards set forth by OSHA for training of a competent person. Although successfully completing this program cannot guarantee a safe work place, it will provide your key workers with an in-depth knowledge of safe assembly and operational practices for Spider equipment. Properly trained employees, working with the well designed and serviced Spider equipment, will go a long way toward insuring job safety.

SERVICE EXPERTISE

Benefits of the program

Workers completing the course receive a certificate from the class that would be suitable to show an OSHA inspector during an on-site visit. Completing the course can be used to provide your insurance company and OSHA with proof of ongoing safety training. Certification can also help you show your general contractor or owner that you are complying with OSHA safety codes for suspended scaffolds.



Spider training benefits

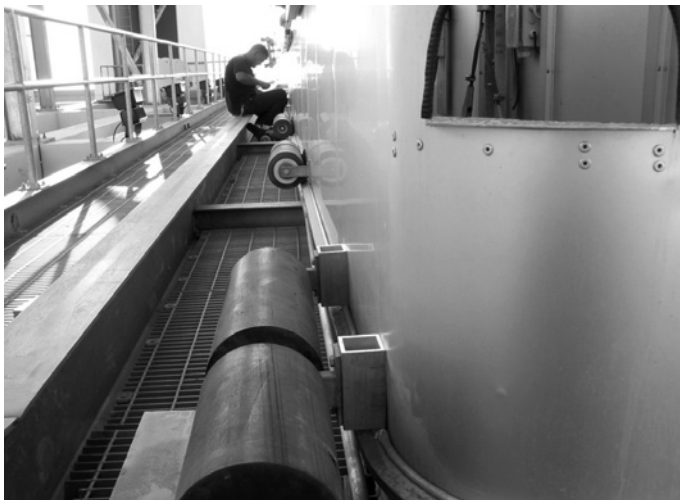
- Improves worker safety awareness
- Helps control accident-related costs
- Helps maintain OSHA compliance
- Saves downtime due to operator errors
- Helps prevent damage to structures from misused equipment
- Projects a more professional image for your company through better trained employees
- Demonstrates your commitment to employee safety

Training Options

- Commercial contractor's course: 10 hour base course completed in one calendar day
- Industrial option for base course: substitute industrial rigging for commercial in base course
- Commercial hoist operation and use: primarily electric drum and traction hoists for commercial applications
- Industrial hoist operation and use: primary pneumatic drum and traction hoist for industrial applications
- City of Chicago Department of Buildings approved Competent Person Training Course
- New York City Department of Buildings approved 16-Hour Suspended Scaffolding Safety Class
- New York City OSHA 10-Hour Hazard Awareness Course

Call or click for more information
1-877-774-3370
www.spiderstaging.com

Service



Professionals rely on Spider equipment, whether rented or owned, to get them to where the work takes them.

Spider understands that equipment reliability improves profitability. With the capabilities of over 200 professionals across 24 operation centers in the Americas, Spider brings thousands of hours of scaffold industry experience to keep contractors working productively. And our technicians work according to extensive checklist-driven processes to ensure you receive timely, consistent products and services no matter where you are. Among the services we provide to help contractors and facility owners do just that are:

Maintenance

- Customer-Owned Hoist Repair and Preventive Maintenance per 1910.28(i)(6), 1926.451 and ANSI 14.1
- Permanently-Installed Platform Annual and Periodic Maintenance per 1910.66(g)(3),(4),(5)& (6) and ANSI 14.1
- Permanently-Installed Platform Inspection per 1910.66 (c)(3), 1910.66(g)(2) and ANSI 14.1
- Retractable Lifeline Repair & Certification
- Repair or Replace Recommendation

Installation & Rigging

- Equipment Installation
- Turnkey Rigging Services
- Rigging Supervision
- Permanent Installation Supervision

Engineering Services

- Application Engineering for Special Access Applications
- One-off Solutions for Special Needs
- Custom Designs
- Davit & Socket Testing per 1910.66 (c)(3) & (4) and ANSI 14.1
- Engineering Review and Stamps available upon request in 50 states

Convenience Services

- Rental Equipment Delivery & Pick-Up
- Pick Up & Delivery of Customer-Owned Hoists with Repair Service

Training

- On-site, Classroom and User Training
- Competent Person Training
- Technician Certification Program
- Hazard Awareness Training
- Hands on Equipment and Rigging Training
- Training in Codes as per Spider Interpretation
- Equipment Maintenance Training Programs

Troubleshooting Help

Spider encourages you to consult your Operators Manuals for specific products in your fleet, but here is a general Question & Answer guide to troubleshoot hoist performance issues. And as always, contact your Spider professional at 877-774-3370 as needed.

How do I correct low voltage?

- First you can't fix what you don't measure. Use your meter correctly to get a run voltage reading and ensure the source is consistently delivering voltage in the rated range.
- Understand that you will lose 2 volts for every 100 ft of 10/3 cord and 4 volts per 100 ft of 10/3 if you are using a yoke.
- Run separate electrical cords to each hoist and plug the cords into separate breakers. Understand that running 2 electric cords increases the load the platform is carrying.
- Increase the cross section of the power cord that you are using. Instead of using 10/3 SO you can use 8/3 SO. Understand that doing this increases the cord weight from 33 lb per 100 ft of cord length to 41 lb per 100 ft, which reduces the platform loading accordingly.
- Install a booster transformer at the power source, especially if the building is prone to fluctuations in voltage during the day, such as when office equipment and air conditioners kick in later in the day.

What is the longest electric cord I can run to 2 yoked SC1000/ SC1500 hoists?
The answer depends on what the electric cord is plugged into. Operating 2 hoists on a yoke attached to 10/3 electric cord will see a voltage drop of 4 volts/100 ft of electric cord. If the source run voltage is 208V, the minimum run voltage at the hoists is 176V. With 1000 lb of load at 208 run volts, an operator can operate with 775 ft of 10/3 electric cord attached to the hoist yoke.

What is the longest electric cord I can run to 2 yoked Zmac/1000® or SC40 hoists?
The 10/3 electric cord attached to yoked Zmac/1000® at the 208 VAC will be 500 ft. The longest 10/3 electric cord attached to yoked SC40s at the 220 VAC will be 600 ft.

Where is the best place to use a buck/boost transformer? At the platform? At the power source?
A buck/boost transformer corrects on-site voltage conditions before they affect the performance of attached equipment. To "buck" voltage, the voltage is being lowered or decreased in amount. To "boost" voltage, the voltage is being raised. Boosting voltage is the most common reason to use transformers in our industry. The best place to use a buck/boost transformer is an installation as close to the power source as possible to maximize the benefits.

How much overloading does it take to affect the hoist's performance?
No amount of overloading is ever acceptable. Remember that the rigging device, counterweight calculation, tiebacks, attachment structure and wire ropes have been sized to handle 4 times the rated load of the hoist. Thoughtlessly adding another bucket of paint or concrete or another panel of glass to "save a trip" quickly adds up to downtime and potential risk to the operator. Increasing a 1000 lb hoist's load by just 15% or 150 lb requires rigging for another 600 lb of moment load. This may exceed the capability of your rigging device or other components of the system. Overloading the hoist by 15% moves the bottom end of the run voltage operating range by 20 volts or more depending on the hoist. Moving to 1500 lb hoists or installing optional overloads to limit hoist travel can mitigate this abuse.

How do I correct overloaded platforms?

- Use the weights in this catalog to calculate the entire weight of the platform, tools, your workers at 250 lb (113.4 kg) each and all the materials on the stage. The hoists lift the entire weight of everything below the shackle of your rigging device. This means the entire wire rope and electric cord length, the yokes, the hoists, platforms, all accessories (i.e. wall rollers, welding grounds), the workers and their materials. Among the most commonly forgotten weights to calculate in the stage: 5/16" IWRC wire rope weighs 18 lb/100 ft of wire rope and 10/3 electric cord weighs 33 lb/100 ft.
- Train operators to regularly clear platforms of debris.
- Encourage the use of material hoists for moving materials to the working level.
- Encourage the use of 1500 lb hoists when there is a likelihood of overloading.

What is the right size generator to use?
For each hoist run from one generator you need 5,000 watts. Running 2 hoists from one generator requires a generator able to produce at least 10,000 watts or 10kW. Whether you rent the generator or not, train the operator on using it. Set the voltage on the generator. Use a marker to locate where the needle on the meter should be at all times during normal operation. Then instruct the operators how to use all the equipment that has been supplied to them. For more info, see Spider's Generator Guidelines 705997-1.

What voltage should I have in order to operate my SC1000/ SC1500 hoist most efficiently?
The SC1000/SC1500 hoist is designed to operate efficiently when the run voltage is at +10%/-15% of the nameplate rating. If you are running a 208V SC1000/SC1500 hoist, your running voltage range would be between 176.8 VAC and 229 VAC.

What voltage should I have in order to operate my Zmac/ SC40 hoists most efficiently?
The Zmac/1000® operates between 188 VAC and 228 VAC but the optimal voltage is 208 VAC. The SC40 operates between 198 VAC and 242 VAC but the optimal voltage is 220 VAC. Both hoists are +/- 10%.

Wind Access Safety & Training

Spider has trained thousands of technicians to safely work with suspended access equipment all over the world.

We believe in hands on training in the field and in our classrooms. We back up this commitment to practical, actionable training:

- Content specialized to wind farm technicians
- Delivered by 26 Certified Trainers
- Offered in our industry-leading training facility and in field locations with full access for safe rigging, ladder climbing and fall prevention
- Successful individuals in our Competent Person program meet the standards set forth by federal OSHA for training of a competent person and receive certificates for verification.
- Content meets OSHA requirements and is approved by several wind turbine OEMs to meet their criteria

Spider Training Benefits:

- Improves worker safety awareness
- Helps control accident-related costs
- Maintains OSHA compliance
- Saves downtime due to operator errors
- Prevents damage to structures from equipment misuse
- Projects better professionalism of employees
- Shows commitment to employee safety

Call or click for more information
1-877-774-3370
www.spiderstaging.com

SERVICE EXPERTISE

CODE OF SAFE PRACTICES FOR SUSPENDED SCAFFOLDS

DEVELOPED FOR INDUSTRY BY SCAFFOLDING, SHORING & FORMING INSTITUTE (SSFI) and SCAFFOLD & ACCESS INDUSTRY ASSOCIATION (SAIA)

It shall be the responsibility of all users to read and comply with the following common sense guidelines which are designed to promote safety in the erecting, dismantling and use of suspended scaffolds. These guidelines do not purport to be all-inclusive nor to supplant or replace other additional safety and precautionary measures to cover usual or unusual conditions. If these guidelines in any way conflict with any state, local, provincial, federal or other government statute or regulation, said statute or regulation shall supersede these guidelines, and it shall be the responsibility of each user to comply therewith.

I. GENERAL GUIDELINES

a. POST THESE SAFETY GUIDELINES in a conspicuous place and be sure that all persons who erect, use, locate or dismantle suspended scaffold systems are fully aware of them and also use them in tool box safety meetings.
b. FOLLOW ALL EQUIPMENT MANUFACTURERS' RECOMMENDATIONS as well as all state, local and federal codes, ordinances and regulations relating to suspended scaffolding.
c. SURVEY THE JOB SITE. A survey shall be made of the job site by a competent person for hazards such as exposed electrical wires, obstructions that could overload or tip the suspended scaffold when it is raised or lowered, unguarded roof edges or openings, and inadequate or missing tiebacks. Those conditions should be corrected before installing or using suspended scaffold systems.
d. INSPECT ALL EQUIPMENT BEFORE EACH USE. Never use any equipment that is damaged or defective in any way. Mark it or tag it as damaged or defective equipment and remove it from the jobsite.
e. ERECT AND DISMANTLE SUSPENDED SCAFFOLD EQUIPMENT in accordance with design and / or manufacturer's recommendations.
f. DO NOT ERECT, DISMANTLE OR ALTER SUSPENDED SCAFFOLD SYSTEMS unless under the supervision of a competent person.
g. DO NOT ABUSE OR MISUSE SUSPENDED SCAFFOLD EQUIPMENT. Never overload platforms or hoists.
h. ERECTED SUSPENDED SCAFFOLDS SHOULD BE CONTINUOUSLY INSPECTED by the user to be sure that they are maintained in a safe condition. Report any unsafe condition to your supervisor.
i. NEVER TAKE CHANCES! IF IN DOUBT REGARDING THE SAFETY OR USE OF SUSPENDED SCAFFOLDS, CONSULT YOUR SCAFFOLD SUPPLIER.
j. NEVER USE SUSPENDED SCAFFOLD EQUIPMENT FOR PURPOSES OR IN OTHER WAYS FOR WHICH IT WAS NOT INTENDED.
k. CARE SHOULD BE TAKEN WHEN OPERATING AND STORING EQUIPMENT DURING WINDY CONDITIONS.
l. SUSPENDED SCAFFOLD SYSTEMS should be installed and used in accordance with the manufacturer's recommended procedures. Do not alter components in the field.
m. SUSPENDED PLATFORMS MUST NEVER BE OPERATED NEAR LIVE POWER LINES unless proper precautions are taken. Consult the power service company for advice.
n. ALWAYS ATTACH FALL ARREST EQUIPMENT when working on suspended scaffolds.
o. DO NOT WORK ON OR INSTALL SUSPENDED SCAFFOLDS if your physical condition is such that you feel dizzy or unsteady in any way.
p. DO NOT WORK ON SUSPENDED SCAFFOLDS when under the influence of alcohol or illegal drugs.

II. GUIDELINES FOR ERECTION AND USE OF SUSPENDED SCAFFOLD SYSTEMS

a. RIGGING:
i. WEAR FALL PREVENTION EQUIPMENT when rigging on exposed roofs or floors.
ii. ROOF HOOKS, PARAPET CLAMPS, OUTRIGGER BEAMS OR OTHER SUPPORTING DEVICES must be capable of supporting the hoist machine rated load with a factor of safety of 4.
iii. VERIFY THAT THE BUILDING OR STRUCTURE WILL SUPPORT the suspended loads with a factor of safety of 4.
iv. ALL OVERHEAD RIGGING must be secured from movement in any direction.
v. COUNTERWEIGHTS USED WITH OUTRIGGER BEAMS must be of a non-flowable material and must be secured to the beam to prevent accidental displacement.
vi. OUTRIGGER BEAMS THAT DO NOT USE COUNTERWEIGHTS must be installed and secured on the roof structure with devices specifically designed for that purpose. Direct connections shall be evaluated by a competent person.
vii. TIE BACK ALL TRANSPORTABLE RIGGING DEVICES. Tiebacks shall be equivalent in strength to suspension ropes.
viii. INSTALL TIEBACKS AT RIGHT ANGLES TO THE FACE OF THE BUILDING and secure, without slack, to a structurally sound portion of the structure, capable of supporting the hoisting machine rated load with a safety factor of 4. IN THE EVENT THAT TIEBACKS CANNOT BE INSTALLED AT RIGHT ANGLES, two tiebacks at opposing angles must be used to prevent movement.
ix. RIG AND USE HOISTING MACHINES DIRECTLY UNDER THEIR SUSPENSION POINTS.
b. WIRE ROPE AND HARDWARE:
i. USE ONLY WIRE ROPE AND ATTACHMENTS as specified by the hoisting machine manufacturer.
ii. ASSURE THAT WIRE ROPE IS LONG ENOUGH to reach to the lowest possible landing.
iii. CLEAN AND LUBRICATE WIRE ROPE in accordance with the wire rope manufacturer's instructions.
iv. HANDLE WIRE ROPE WITH CARE.
v. COIL AND UNCOIL WIRE ROPE in accordance with

manufacturer's instructions in order to avoid kinks or damage.
vi. TIGHTEN WIRE ROPE CLAMPS in accordance with the clamp manufacturer's instructions.
vii. INSPECT WIRE ROPE IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS. DO NOT USE WIRE ROPE THAT IS KINKED, BIRDCAGED, CORRODED, UNDERSIZED OR DAMAGED IN ANY WAY. Do not expose wire rope to fire, undue heat, corrosive atmosphere, electricity, chemicals or damage by tool handling.
viii. USE THIMBLES AND SHACKLES AT ALL WIRE ROPE SUSPENSION TERMINATIONS.
ix. USE J-TYPE CLAMPS OR SWEDGE FITTINGS. Do not use U-bolts. Retighten J Clamps under load and retighten daily.
x. WIRE ROPES USED WITH TRACTION HOISTS MUST HAVE PREPARED ENDS. Follow manufacturer's recommendations.
c. POWER SUPPLY FOR MOTORIZED EQUIPMENT:
i. GROUND ALL ELECTRICAL POWER SOURCES AND POWER CORD CONNECTIONS and protect them with circuit breakers.
ii. USE POWER CORDS OR AIR HOSES OF THE PROPER SIZE THAT ARE LONG ENOUGH for the job.
iii. POWER CORD OR AIR HOSE CONNECTIONS MUST BE RESTRAINED to prevent their separation.
iv. USE STRAIN RELIEF DEVICES TO ATTACH POWER CORDS OR AIR SUPPLY HOSES TO THE SUSPENDED SCAFFOLD to prevent them from falling.
v. PROTECT POWER CORDS OR AIR HOSES AT SHARP EDGES.
vi. USE GFI WITH POWER TOOLS.
d. FALL ARREST EQUIPMENT:
i. EACH PERSON ON A SUSPENDED SCAFFOLD must be attached to a separate fall arrest system unless the installation was specifically designed not to require one.
ii. EACH LIFELINE MUST BE FASTENED IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS to a separate anchorage capable of holding a minimum of 5000 pounds (2,268 kg).
iii. DO NOT WRAP LIFELINES AROUND STRUCTURAL MEMBERS unless lifelines are protected and a suitable anchorage connection is used.
iv. PROTECT LIFELINES AT SHARP CORNERS to prevent chafing.
v. RIG FALL ARREST SYSTEMS to prevent free fall in excess of 6 ft (1.8 m).
vi. SUSPEND LIFELINES FREELY without contact with structural members or building façade.
vii. USE LIFELINES OF SIZE AND CONSTRUCTION that are compatible with the rope grab use.
viii. ASSURE A PROPERLY ATTACHED ROPE GRAB IS INSTALLED ON EACH LIFELINE IN THE PROPER DIRECTION. Install in accordance with the manufacturer's recommendations.
x. ONLY MOVE SUSPENDED SCAFFOLDS HORIZONTALLY WHEN NOT OCCUPIED.
xi. WHEN RIGGING FOR ANOTHER DROP assure sufficient wire rope is available before moving the suspended scaffold system horizontally.
xii. WHEN WELDING FROM SUSPENDED SCAFFOLDS:
1. Assure platform is grounded to structure.
2. Insulate wire rope above and below the platform.
3. Insulate wire rope at suspension point and assure wire does not contact structure along its entire length.
4. Prevent the bitter end from touching the welding ground.

Since field conditions vary and are beyond the control of the SSFI and the SIA, safe and proper use of suspended scaffolding is the sole responsibility of the user.

Reprinting of this publication does not imply approval of product by the Institute or indicate membership in the Institute.

Scaffolding, Shoring & Forming Institute
1300 Sumner Ave., Cleveland, Ohio 44115
Publication SP201
Printed in U.S.A 2/99
(2700)

Codes of Safe Practice are available in Spanish from the SSFI at SSFI.org

CSA Safety Code for Suspended Platforms – www.csa.ca
(Z271-10)

CSA Health & Safety Code for Suspended Equipment Operations – www.csa.ca
(Z91-02) Reaffirmed 2008

OSHA Regulations for Scaffolding—www.osha.gov

(29 CFR PART 1910)
1910.28 Safety Requirements for Scaffolding – Walking/working surfaces

1910.28(a)

"General requirements for all scaffolds."

1910.28(a)(4)
Scaffolds and their components shall be capable of supporting without failure at least four times the maximum intended load.

1910.28(a)(5)
Scaffolds and other devices mentioned or described in this section shallbe maintained in safe condition. Scaffolds shall not be altered or moved horizontally while they are in use or occupied.

1910.28(a)(6)
Any scaffold damaged or weakened from any cause shall be immediately repaired and shall not be used until repairs have been completed.

1910.28(a)(7)
Scaffolds shall not be loaded in excess of the working load for which they are intended.

1910.28(a)(17)
Scaffolds shall be provided with a screen between the toeboard and the guardrail, extending along the entire opening, consisting of No. 18 gauge U.S. Standard Wire one-half-inch mesh or the equivalent, where persons are required to work or pass under the scaffolds.

1910.28(a)(18)
Employees shall not work on scaffolds during storms or high winds.

1910.28(a)(20)
Tools, materials, and debris shall not be allowed to accumulate in quantities to cause a hazard.

1910.28(a)(21)
Only treated or protected fiber rope shall be used for or near any work involving the use of corrosive substances or chemicals.

Wire or fiber rope used for scaffold suspension shall be capable of supporting at least six times the intended load.

1910.28(a)(23)
When acid solutions are used for cleaning buildings over 50 feet in height, wire rope supported scaffolds shall be used.

1910.28(a)(27)
Special precautions shall be taken to protect scaffold members, including any wire or fiber ropes, when using a heat-producing process.

1910.28(g)

"Two-point suspension scaffolds (swinging scaffolds)."

1910.28(g)(1)
Two-point suspension scaffold platforms shall be not less than 20 inches no more than 36 inches wide overall. The platform shall be securely fastened to the hangers by U-bolts or by other equivalent means.

1910.28(g)(2)
The hangers of two-point suspension scaffolds shall be made of wrought iron, mild steel, or other equivalent material having a cross-sectional area capable of sustaining four times the maximum intended load, and shall be designed with a support for guardrail, intermediate rail, and toeboard.

1910.28(g)(3)
When hoisting machines are used on two-point suspension scaffolds, such machines shall be of a design tested and approved by a nationally recognized testing laboratory. Refer to 1910.7 for definition of nationally recognized testing laboratory.

1910.28(g)(4)
The roof irons or hooks shall be of wrought iron, mild steel, or other equivalent material of proper size and design, securely installed and anchored. Tie-backs of three-fourth inch manila rope or the equivalent shall serve as a secondary means of anchorage, installed at right angles to the face of the building whenever possible and secured to a structurally sound portion of the building.

1910.28(g)(5)
Guardrails not less than 2 x 4 inches or the equivalent and not less than 36 inches or more than 42 inches high, with a mid-rail, when required, of 1- x 4-inch lumber or equivalent, and toeboards, shall be installed at all open sides on all scaffolds more than 10 feet above the ground or floor. Toeboards shall be a minimum of 4 inches in height. Wire mesh shall be installed in accordance with paragraph (a)(17) of this section.

1910.28(g)(6)
Two-point suspension scaffolds shall be suspended by wire or fiber ropes. Wire and fiber ropes shall conform to paragraph (a)(22) of this section.

1910.28(g)(7)
The blocks for fiber ropes shall be of standard 6-inch size, consisting of at least one double and one single block. The sheaves of all blocks shall fit the size of rope used.

1910.28(g)(8)
All wire ropes, fiber ropes, slings, hangers, platforms, and other supporting parts shall be inspected before every installation. Periodic inspections shall be made while the scaffold is in use.

1910.28(g)(9)
On suspension scaffolds designed for a working load of 500 pounds no more than two men shall be permitted to work at one time. On suspension scaffolds with a working load of 750 pounds, no more than three men shall be permitted to work at one time. Each workman shall be protected by a safety lifebelt attached to a lifeline. The lifeline shall be securely attached to substantial members of the structure (not scaffold), or to securely rigged lines, which will safely suspend the workman in case of a fall.

1910.28(g)(10)
Where acid solutions are used, fiber ropes are not permitted unless acid-proof.

1910.28(g)(11)
Two-point suspension scaffolds shall be securely lashed to the building or structure to prevent them from swaying. Window cleaners' anchors shall not be used for this purpose.

1910.28(g)(12)
The platform of every two-point suspension scaffold shall be one of the following types:

1910.28(g)(12)(i)
The side stringer of ladder-type platforms shall be clear straight-grained spruce or materials of equivalent strength and durability. The rungs shall be of straight-grained oak, ash, or hickory, at least 1 1/8 inch in diameter, with seven-eighth inch tenons mortised into the side stringers at least seven-eighth inch. The stringers shall be tied together with the tie rods not less than one-quarter inch in diameter, passing through the stringers and riveted up tight against washers on both ends. The flooring strips shall be spaced not more than five-eighth inch apart except at the side rails where the space may be 1 inch. Ladder-type platforms shall be constructed in accordance with table D-17.

1910.28(g)(12)(ii)
Plank-type platforms shall be composed of not less than nominal 2 x 8-inch unspliced planks, properly cleated together on the underside starting 6 inches from each end; intervals in between shall not exceed 4 feet. The plank-type platform shall not extend beyond the hangers more than 18 inches. A bar or other effective means shall be securely fastened to the platform at each end to prevent its slipping off the hanger. The span between hangers for plank-type platforms shall not exceed 10 feet.

1910.28(g)(12)(iii)
Beam platforms shall have side stringers of lumber not less than 2 x 6 inches set on edge. The span between hangers shall not exceed 12 feet when beam platforms are used. The flooring shall be supported on 2- and 6-inch crossbeams, laid flat and set into the upper edge of the stringers with a snug fit, at intervals of not more than 4 feet, securely nailed in place. The flooring shall be of 1- x 6-inch material properly nailed. Floorboards shall not be spaced more than one-half inch apart.

TABLE D-17 - SCHEDULE FOR LADDER-TYPE PLATFORMS

	Length of platform (feet)		
	12	14 & 16	18 & 20
Side stringers, minimum cross section (finished sizes):			
At ends (in.)	1 3/4 x 2 3/4	1 3/4 x 2 3/4	1 3/4 x 3
At middle (in.)	1 3/4 x 3 3/4	1 3/4 x 3 3/4	1 1/4 x 4
Reinforcing strip (minimum) (1)	.....	.....	.....
Rungs (2)	.....	.....	.....
Tie rods:			
Number (minimum)	3	4	4
Diameter (minimum)	1/4 in	1/4 in	1/4 in
Flooring, minimum finished size (in.)	1/2 x 2 3/4	1/2 x 2 3/4	1/2 x 2 3/4

TABLE D-17 - SCHEDULE FOR LADDER-TYPE PLATFORMS

[CONTINUED]

	Length of platform (feet)	
	22 & 24	28 & 30
Side stringers, minimum cross section (finished sizes):		
At ends (in.)	1 3/4 x 3	1 3/4 x 3 1/2
At middle (in.)	1 3/4 x 4 1/4	1 3/4 x 5
Reinforcing strip (minimum) (1)	.....	.....
Rungs (2)	.....	.....
Tie rods:		
Number (minimum)	5	6
Diameter (minimum)	1/4 in	1/4 in
Flooring, minimum finished size (in.)	1/2 x 3/4	1/2 x 2 3/4

Footnote(1) A 1/8 x 7/8-in, steel reinforcing strip or its equivalent shall be attached to the side or underside full length.
Footnote(2) Rungs shall be 1 1/8-in. minimum, diameter with at least 7/8-in. diameter tenons, and the maximum spacing shall be 12 in. center to center.

1910.28(i)
"Single-point adjustable suspension scaffolds."

1910.28(i)(1)
The scaffolding, including power units or manually operated winches, shall be a type tested and listed by a nationally recognized testing laboratory. Refer to 1910.399(a)(77) for definition of listed, and 1910.7 for nationally recognized testing laboratory.

1910.28(i)(2)
[Reserved]

1910.28(i)(3)
All power-operated gears and brakes shall be enclosed.

1910.28(i)(4)
In addition to the normal operating brake, all-power driven units must have an emergency brake which engages automatically when the normal speed of descent is exceeded.

1910.28(i)(5)
Guards, mid-rails, and toeboards shall completely enclose the cage or basket. Guardrails shall be no less than 2 by 4 inches or the equivalent installed no less than 36 inches nor more than 42 inches above the platform. Mid-rails shall be 1 by 6 inches or the equivalent; installed equidistant between the guardrail and the platform. Toeboards shall be a minimum of 4 inches in height.

1910.28(i)(6)
The hoisting machines, cables, and equipment shall be regularly serviced and inspected after each installation and every 30 days thereafter.

1910.28(i)(7)
The units may be combined to form a two-point suspension scaffold. Such scaffold shall comply with paragraph (g) of this section.

1910.28(i)(8)
The supporting cable shall be straight for its entire length, and the operator shall not sway the basket and fix the cable to any intermediate points to change his original path of travel.

1910.28(i)(9)
Equipment shall be maintained and used in accordance with the manufacturers' instructions.

1910.28(i)(10)
Suspension methods shall conform to applicable provisions of paragraphs (f) and (g) of this section.

1910.28(j)
"Boatswain's chairs."

1910.28(j)(1)
The chair seat shall be not less than 12 by 24 inches, and of 1-inch thickness. The seat shall be reinforced on the underside to prevent the board from splitting.

1910.28(j)(2)
The two fiber rope seat slings shall be of 5/8-inch diameter, reeved through the four seat holes so as to cross each other on the underside of the seat.

1910.28(j)(3)
Seat slings shall be of at least 3/8-inch wire rope when a workman is conducting a heat producing process such as gas or arc welding.

1910.28(j)(4)
The workman shall be protected by a safety life belt attached to a lifeline. The lifeline shall be securely attached to substantial members of the structure (not scaffold), or to securely rigged lines, which will safely suspend the worker in case of a fall.

1910.28(j)(5)
The tackle shall consist of correct size ball bearing or bushed blocks and properly spliced 5/8-inch diameter first-grade manila rope.

1910.28(j)(6)
The roof irons, hooks, or the object to which the tackle is anchored shall be securely installed. Tiebacks when used shall be installed at right angles to the face of the building and securely fastened to a chimney.

OSHA Regulations Governing Construction—www.osha.gov

(29 CFR PART 1926)

Subpart L – This subpart applies to all scaffolds used in workplaces covered by this part. It does not apply to crane or derrick suspended personnel platforms, which are covered by 1926.550(g). The criteria for aerial lifts are set out exclusively in 1926.453.

This section does not apply to aerial lifts, the criteria for which are set out exclusively in 1926.453.

1926.451(a)

"Capacity"

1926.451(a)(1)

Except as provided in paragraphs (a)(2), (a)(3), (a)(4), (a)(5) and (g) of this section, each scaffold and scaffold component shall be capable of supporting, without failure, its own weight and at least 4 times the maximum intended load applied or transmitted to it.

1926.451(a)(2)

Direct connections to roofs and floors, and counterweights used to balance adjustable suspension scaffolds, shall be capable of resisting at least 4 times the tipping moment imposed by the scaffold operating at the rated load of the hoist, or 1.5 (minimum) times the tipping moment imposed by the scaffold operating at the stall load of the hoist, whichever is greater.

1926.451(a)(3)

Each suspension rope, including connecting hardware, used on non-adjustable suspension scaffolds shall be capable of supporting, without failure, at least 6 times the maximum intended load applied or transmitted to that rope.

1926.451(a)(4)

Each suspension rope, including connecting hardware, used on adjustable suspension scaffolds shall be capable of supporting, without failure, at least 6 times the maximum intended load applied or transmitted to that rope with the scaffold operating at either the rated load of the hoist, or 2 (minimum) times the stall load of the hoist, whichever is greater.

1926.451(a)(5)

The stall load of any scaffold hoist shall not exceed 3 times its rated load.

1926.451(a)(6)

Scaffolds shall be designed by a qualified person and shall be constructed and loaded in accordance with that design. Non-mandatory Appendix A to this subpart contains examples of criteria that will enable an employer to comply with paragraph (a) of this section.

1926.451(d)

"Criteria for suspension scaffolds."

1926.451(d)(1)

All suspension scaffold support devices, such as outrigger beams, cornice hooks, parapet clamps, and similar devices, shall rest on surfaces capable of supporting at least 4 times the load imposed on them by the scaffold operating at the rated load of the hoist (or at least 1.5 times the load imposed on them by the scaffold at the stall capacity of the hoist, whichever is greater).

1926.451(d)(2)

Suspension scaffold outrigger beams, when used, shall be made of structural metal or equivalent strength material, and shall be restrained to prevent movement.

1926.451(d)(3)

The inboard ends of suspension scaffold outrigger beams shall be stabilized by bolts or other direct connections to the floor or roof deck, or they shall have their inboard ends stabilized by counterweights, except masons' multi-point adjustable suspension scaffold outrigger beams shall not be stabilized by counterweights.

1926.451(d)(3)(i)

Before the scaffold is used, direct connections shall be evaluated by a competent person who shall confirm, based on the evaluation, that the supporting surfaces are capable of supporting the loads to be imposed. In addition, masons' multi-point adjustable suspension scaffold connections shall be designed by an engineer experienced in such scaffold design.

1926.451(d)(3)(ii)

Counterweights shall be made of non-flowable material. Sand, gravel and similar materials that can be easily dislocated shall not be used as counterweights.

1926.451(d)(3)(iii)

Only those items specifically designed as counterweights shall be used to counterweight scaffold systems. Construction materials such as, but not limited to, masonry units and rolls of roofing felt, shall not be used as counterweights.

1926.451(d)(3)(iv)

Counterweights shall be secured by mechanical means to the outrigger beams to prevent accidental displacement.

1926.451(d)(3)(v)

Counterweights shall not be removed from an outrigger beam until the scaffold is disassembled.

1926.451(d)(3)(vi)

Outrigger beams which are not stabilized by bolts or other direct connections to the floor or roof deck shall be secured by tiebacks.

1926.451(d)(3)(vii)
Tiebacks shall be equivalent in strength to the suspension ropes.

1926.451(d)(3)(viii)
Outrigger beams shall be placed perpendicular to its bearing support (usually the face of the building or structure). However, where the employer can demonstrate that it is not possible to place an outrigger beam perpendicular to the face of the building or structure because of obstructions that cannot be moved, the outrigger beam may be placed at some other angle, provided opposing angle tiebacks are used.

1926.451(d)(3)(ix)
Tiebacks shall be secured to a structurally sound anchorage on the building or structure. Sound anchorages include structural members, but do not include standpipes, vents, other piping systems, or electrical conduit.

1926.451(d)(3)(x)
Tiebacks shall be installed perpendicular to the face of the building or structure, or opposing angle tiebacks shall be installed. Single tiebacks installed at an angle are prohibited.

1926.451(d)(4)
Suspension scaffold outrigger beams shall be:

1926.451(d)(4)(i)
Provided with stop bolts or shackles at both ends;

1926.451(d)(4)(ii)
Securely fastened together with the flanges turned out when channel iron beams are used in place of I-beams;

1926.451(d)(4)(iii)
Installed with all bearing supports perpendicular to the beam center line;

1926.451(d)(4)(iv)
Set and maintained with the web in a vertical position; and

1926.451(d)(4)(v)
When an outrigger beam is used, the shackle or clevis with which the rope is attached to the outrigger beam shall be placed directly over the center line of the stirrup.

1926.451(d)(5)
Suspension scaffold support devices such as cornice hooks, roof hooks, roof irons, parapet clamps, or similar devices shall be:

1926.451(d)(5)(i)
Made of steel, wrought iron, or materials of equivalent strength;

1926.451(d)(5)(ii)
Supported by bearing blocks; and

1926.451(d)(5)(iii)
Secured against movement by tiebacks installed at right angles to the face of the building or structure, or opposing angle tiebacks shall be installed and secured to a structurally sound point of anchorage on the building or structure. Sound points of anchorage include structural members, but do not include standpipes, vents, other piping systems, or electrical conduit.

1926.451(d)(5)(iv)
Tiebacks shall be equivalent in strength to the hoisting rope.

1926.451(d)(6)
When winding drum hoists are used on a suspension scaffold, they shall contain not less than four wraps of the suspension rope at the lowest point of scaffold travel. When other types of hoists are used, the suspension ropes shall be long enough to allow the scaffold to be lowered to the level below without the rope end passing through the hoist, or the rope end shall be configured or provided with means to prevent the end from passing through the hoist.

1926.451(d)(7)
The use of repaired wire rope as suspension rope is prohibited.

1926.451(d)(8)
Wire suspension ropes shall not be joined together except through the use of eye splice thimbles connected with shackles or coverplates and bolts.

1926.451(d)(9)
The load end of wire suspension ropes shall be equipped with proper size thimbles and secured by eyesplicing or equivalent means.

1926.451(d)(10)
Ropes shall be inspected for defects by a competent person prior to each workshift and after every occurrence which could affect a rope's integrity. Ropes shall be replaced if any of the following conditions exist:

1926.451(d)(10)(i)
Any physical damage which impairs the function and strength of the rope.

1926.451(d)(10)(ii)
Kinks that might impair the tracking or wrapping of rope around the drum(s) or sheave(s).

1926.451(d)(10)(iii)
Six randomly distributed broken wires in one rope lay or three broken wires in one strand in one rope lay.

1926.451(d)(10)(iv)
Abrasion, corrosion, scrubbing, flattening or peening causing loss of more than one-third of the original diameter of the outside wires.

1926.451(d)(10)(v)
Heat damage caused by a torch or any damage caused by contact with electrical wires.

1926.451(d)(10)(vi)
Evidence that the secondary brake has been activated during an overspeed condition and has engaged the suspension rope.

1926.451(d)(11)
Swaged attachments or spliced eyes on wire suspension ropes shall not be used unless they are made by the wire rope manufacturer or a qualified person.

1926.451(d)(12)
When wire rope clips are used on suspension scaffolds:

1926.451(d)(12)(i)
There shall be a minimum of 3 wire rope clips installed, with the clips a minimum of 6 rope diameters apart;

1926.451(d)(12)(ii)
Clips shall be installed according to the manufacturer's recommendations;

1926.451(d)(12)(iii)
Clips shall be retightened to the manufacturer's recommendations after the initial loading;

1926.451(d)(12)(iv)
Clips shall be inspected and retightened to the manufacturer's recommendations at the start of each workshift thereafter;

1926.451(d)(12)(v)
U-bolt clips shall not be used at the point of suspension for any scaffold hoist;

1926.451(d)(12)(vi)
When U-bolt clips are used, the U-bolt shall be placed over the dead end of the rope, and the saddle shall be placed over the live end of the rope.

1926.451(d)(13)
Suspension scaffold power-operated hoists and manual hoists shall be tested by a qualified testing laboratory.

1926.451(d)(14)
Gasoline-powered equipment and hoists shall not be used on suspension scaffolds.

1926.451(d)(15)
Gears and brakes of power-operated hoists used on suspension scaffolds shall be enclosed.

1926.451(d)(16)
In addition to the normal operating brake, suspension scaffold power-operated hoists and manually operated hoists shall have a braking device or locking pawl which engages automatically when a hoist makes either of the following uncontrolled movements: an instantaneous change in momentum or an accelerated overspeed.

1926.451(d)(17)
Manually operated hoists shall require a positive crank force to descend.

1926.451(d)(18)
Two-point and multi-point suspension scaffolds shall be tied or otherwise secured to prevent them from swaying, as determined to be necessary based on an evaluation by a competent person. Window cleaners' anchors shall not be used for this purpose.

1926.451(d)(19)
Devices whose sole function is to provide emergency escape and rescue shall not be used as working platforms. This provision does not preclude the use of systems which are designed to function both as suspension scaffolds and emergency systems.

1926.451(f)
"Use."

1926.451(f)(1)
Scaffolds and scaffold components shall not be loaded in excess of their maximum intended loads or rated capacities, whichever is less.

1926.451(f)(2)
The use of shore or lean-to scaffolds is prohibited.

1926.451(f)(3)
Scaffolds and scaffold components shall be inspected for visible defects by a competent person before each work shift, and after any occurrence which could affect a scaffold's structural integrity.

1926.451(f)(4)
Any part of a scaffold damaged or weakened such that its strength is less than that required by paragraph (a) of this section shall be immediately repaired or replaced, braced to meet those provisions, or removed from service until repaired.

1926.451(f)(5)
Scaffolds shall not be moved horizontally while employees are on them, unless they have been designed by a registered professional engineer specifically for such movement or, for mobile scaffolds, where the provisions of 1926.452(w) are followed.

1926.451(f)(6)
The clearance between scaffolds and power lines shall be as follows: Scaffolds shall not be erected, used, dismantled, altered, or moved such that they or any conductive material handled on them might come closer to exposed and energized power lines than as follows:

*Insulated Lines

Voltage	Minimum distance	Alternatives
Less than 300 volts.	3 feet (0.9 m)	
300 volts to 50 kv.	10 feet (3.1 m)	
More than 50 kv....	10 feet (3.1 m) plus 0.4 inches (1.0 cm) for each 1 kv over 50 kv.	2 times the length of the line insulator, but never less than 10 feet (3.1 m).

*Uninsulated lines

Voltage	Minimum distance	Alternatives
Less than 50 kv....	10 feet (3.1 m).	
More than 50 kv....	10 feet (3.1 m) plus 0.4 inches (1.0 cm) for each 1 kv over 50 kv.	2 times the length of the line insulator, but never less than 10 feet (3.1 m).

Exception to paragraph (f)(6): Scaffolds and materials may be closer to power lines than specified above where such clearance is necessary for performance of work, and only after the utility company, or electrical system operator, has been notified of the need to work closer and the utility company, or electrical system operator, has deenergized the lines, relocated the lines, or installed protective coverings to prevent accidental contact with the lines.

1926.451(f)(7)
Scaffolds shall be erected, moved, dismantled, or altered only under the supervision and direction of a competent person qualified in scaffold erection, moving, dismantling or alteration. Such activities shall be performed only by experienced and trained employees selected for such work by the competent person.

1926.451(f)(8)
Employees shall be prohibited from working on scaffolds covered with snow, ice, or other slippery material except as necessary for removal of such materials.

1926.451(f)(9)
Where swinging loads are being hoisted onto or near scaffolds such that the loads might contact the scaffold, tag lines or equivalent measures to control the loads shall be used.

1926.451(f)(10)
Suspension ropes supporting adjustable suspension scaffolds shall be of a diameter large enough to provide sufficient surface area for the functioning of brake and hoist mechanisms.

1926.451(f)(11)
Suspension ropes shall be shielded from heat-producing processes. When acids or other corrosive substances are used on a scaffold, the ropes shall be shielded, treated to protect against the corrosive substances, or shall be of a material that will not be damaged by the substance being used.

1926.451(f)(12)
Work on or from scaffolds is prohibited during storms or high winds unless a competent person has determined that it is safe for employees to be on the scaffold and those employees are protected by a personal fall arrest system or wind screens. Wind screens shall not be used unless the scaffold is secured against the anticipated wind forces imposed.

1926.451(f)(13)
Debris shall not be allowed to accumulate on platforms.

1926.451(f)(14)
Makeshift devices, such as but not limited to boxes and barrels, shall not be used on top of scaffold platforms to increase the working level height of employees.

1926.451(f)(15)
Ladders shall not be used on scaffolds to increase the working level height of employees, except on large area scaffolds where employers have satisfied the following criteria:

1926.451(f)(15)(i)
When the ladder is placed against a structure which is not a part of the scaffold, the scaffold shall be secured against the sideways thrust exerted by the ladder;

1926.451(f)(15)(ii)
The platform units shall be secured to the scaffold to prevent their movement;

1926.451(f)(15)(iii)
The ladder legs shall be on the same platform or other means shall be provided to stabilize the ladder against unequal platform deflection, and

1926.451(f)(15)(iv)
The ladder legs shall be secured to prevent them from slipping or being pushed off the platform.

1926.451(f)(16)
Platforms shall not deflect more than 1/60 of the span when loaded.

1926.451(f)(17)
To reduce the possibility of welding current arcing through the suspension wire rope when performing welding from suspended scaffolds, the following precautions shall be taken, as applicable:

1926.451(f)(17)(i)
An insulated thimble shall be used to attach each suspension wire rope to its hanging support (such as cornice hook or outrigger). Excess suspension wire rope and any additional independent lines from grounding shall be insulated;

1926.451(f)(17)(ii)
The suspension wire rope shall be covered with insulating material extending at least 4 feet (1.2 m) above the hoist. If there is a tail line below the hoist, it shall be insulated to prevent contact with the platform. The portion of the tail line that hangs free below the scaffold shall be guided or retained, or both, so that it does not become grounded;

1926.451(f)(17)(iii)
Each hoist shall be covered with insulated protective covers;

1926.451(f)(17)(iv)
In addition to a work lead attachment required by the welding process, a grounding conductor shall be connected from the scaffold to the structure. The size of this conductor shall be at least the size of the welding process work lead, and this conductor shall not be in series with the welding process or the work piece;

1926.451(f)(17)(v)
If the scaffold grounding lead is disconnected at any time, the welding machine shall be shut off; and

1926.451(f)(17)(vi)
An active welding rod or uninsulated welding lead shall not be allowed to contact the scaffold or its suspension system.

1926.451(g)
"Fall protection."

1926.451(g)(1)
Each employee on a scaffold more than 10 feet (3.1 m) above a lower level shall be protected from falling to that lower level. Paragraphs (g)(1)(i) through (vii) of this section establish the types of fall protection to be provided to the employees on each type of scaffold. Paragraph (g)(2) of this section addresses fall protection for scaffold erectors and dismantlers.

Note to paragraph (g)(1): The fall protection requirements for employees installing suspension scaffold support systems on floors, roofs, and other elevated surfaces are set forth in subpart M of this part.

1926.451(g)(1)(i)
Each employee on a boatswains' chair, catenary scaffold, float scaffold, needle beam scaffold, or ladder jack scaffold shall be protected by a personal fall arrest system;

1926.451(g)(1)(ii)
Each employee on a single-point or two-point adjustable suspension scaffold shall be protected by both a personal fall arrest system and guardrail system;

1926.451(g)(1)(iii)
Each employee on a crawling board (chicken ladder) shall be protected by a personal fall arrest system, a guardrail system (with minimum 200 pound toprail capacity), or by a three-fourth inch (1.9 cm) diameter grabline or equivalent handhold securely fastened beside each crawling board;

1926.451(g)(1)(iv)
Each employee on a self-contained adjustable scaffold shall be protected by a guardrail system (with minimum 200 pound toprail capacity) when the platform is supported by the frame structure, and by both a personal fall arrest system and a guardrail system (with minimum 200 pound toprail capacity) when the platform is supported by ropes;

1926.451(g)(1)(v)
Each employee on a walkway located within a scaffold shall be protected by a guardrail system (with minimum 200 pound toprail capacity) installed within 9 1/2 inches (24.1 cm) of and along at least one side of the walkway.

1926.451(g)(1)(vi)
Each employee performing overhand bricklaying operations from a supported scaffold shall be protected from falling from all open sides and ends of the scaffold (except at the side next to the wall being laid) by the use of a personal fall arrest system or guardrail system (with minimum 200 pound toprail capacity).

1926.451(g)(1)(vii)
For all scaffolds not otherwise specified in paragraphs (g)(1)(i) through (g)(1)(vi) of this section, each employee shall be protected by the use of personal fall arrest systems or guardrail systems meeting the requirements of paragraph (g)(4) of this section.

1926.451(g)(2)
Effective September 2, 1997, the employer shall have a competent person determine the feasibility and safety of providing fall protection for employees erecting or dismantling supported scaffolds. Employers are required to provide fall protection for employees erecting or dismantling supported scaffolds where the installation and use of such protection is feasible and does not create a greater hazard.

1926.451(g)(3)
In addition to meeting the requirements of 1926.502(d), personal fall arrest systems used on scaffolds shall be attached by lanyard to a vertical lifeline, horizontal lifeline, or scaffold structural member. Vertical lifelines shall not be used when overhead components, such as overhead protection or additional platform levels, are part of a single-point or two-point adjustable suspension scaffold.

1926.451(g)(3)(i)
When vertical lifelines are used, they shall be fastened to a fixed safe point of anchorage, shall be independent of the scaffold, and shall be protected from sharp edges and abrasion. Safe points of anchorage include structural members of buildings, but do not include standpipes, vents, other piping systems, electrical conduit, outrigger beams, or counterweights.

1926.451(g)(3)(ii)
When horizontal lifelines are used, they shall be secured to two or more structural members of the scaffold, or they may be looped around both suspension and independent suspension lines (on scaffolds so equipped) above the hoist and brake attached to the end of the scaffold. Horizontal lifelines shall not be attached only to the suspension ropes.

1926.451(g)(3)(iii)
When lanyards are connected to horizontal lifelines or structural members on a single-point or two-point adjustable suspension scaffold, the scaffold shall be equipped with additional independent support lines and automatic locking devices capable of stopping the fall of the scaffold in the event one or both of the suspension ropes fail. The independent support lines shall be equal in number and strength to the suspension ropes.

1926.451(g)(3)(iv)
Vertical lifelines, independent support lines, and suspension ropes shall not be attached to each other, nor shall they be attached to or use the same point of anchorage, nor shall they be attached to the same point on the scaffold or personal fall arrest system.

1926.451(g)(4)
Guardrail systems installed to meet the requirements of this section shall comply with the following provisions (guardrail systems built in accordance with Appendix A to this subpart will be deemed to meet the requirements of paragraphs (g)(4)(vii), (viii), and (ix) of this section):

1926.451(g)(4)(i)
Guardrail systems shall be installed along all open sides and ends of platforms. Guardrail systems shall be installed before the scaffold is released for use by employees other than erection/dismantling crews.

1926.451(g)(4)(ii)
The top edge height of toprails or equivalent member on supported scaffolds manufactured or placed in service after January 1, 2000 shall be installed between 38 inches (0.97 m) and 45 inches (1.2 m) above the platform surface. The top edge height on supported scaffolds manufactured and placed in service before January 1, 2000, and on all suspended scaffolds where both a guardrail and a personal fall arrest system are required shall be between 36 inches (0.9 m) and 45 inches (1.2 m). When conditions warrant, the height of the top edge may exceed the 45-inch height, provided the guardrail system meets all other criteria of paragraph (g)(4).

1926.451(g)(4)(iii)
When midrails, screens, mesh, intermediate vertical members, solid panels, or equivalent structural members are used, they shall be installed between the top edge of the guardrail system and the scaffold platform.

1926.451(g)(4)(iv)
When midrails are used, they shall be installed at a height approximately midway between the top edge of the guardrail system and the platform surface.

1926.451(g)(4)(v)
When screens and mesh are used, they shall extend from the top edge of the guardrail system to the scaffold platform, and along the entire opening between the supports.

1926.451(g)(4)(vi)
When intermediate members (such as balusters or additional rails) are used, they shall not be more than 19 inches (48 cm) apart.

1926.451(g)(4)(vii)
Each toprail or equivalent member of a guardrail system shall be capable of withstanding, without failure, a force applied in any downward or horizontal direction at any point along its top edge of at least 100 pounds (445 n) for guardrail systems installed on single-point adjustable suspension scaffolds or two-point adjustable suspension scaffolds, and at least 200 pounds (890 n) for guardrail systems installed on all other scaffolds.

1926.451(g)(4)(viii)
When the loads specified in paragraph (g)(4)(vii) of this section are applied in a downward direction, the top edge shall not drop below the height above the platform surface that is prescribed in paragraph (g)(4)(ii) of this section.

1926.451(g)(4)(ix)
Midrails, screens, mesh, intermediate vertical members, solid panels, and equivalent structural members of a guardrail system shall be capable of withstanding, without failure, a force applied in any downward or horizontal direction at any point along the midrail or other member of at least 75 pounds (333 n) for guardrail systems with a minimum 100 pound toprail capacity, and at least 150 pounds (666 n) for guardrail systems with a minimum 200 pound toprail capacity.

1926.451(g)(4)(x)
Suspension scaffold hoists and non-walk-through stirrups may be used as end guardrails, if the space between the hoist or stirrup and the side guardrail or structure does not allow passage of an employee to the end of the scaffold.

1926.451(g)(4)(xi)
Guardrails shall be surfaced to prevent injury to an employee from punctures or lacerations, and to prevent snagging of clothing.

1926.451(g)(4)(xii)
The ends of all rails shall not overhang the terminal posts except when such overhang does not constitute a projection hazard to employees.

1926.451(g)(4)(xiii)
Steel or plastic banding shall not be used as a toprail or midrail.

1926.451(g)(4)(xiv)
Manila or plastic (or other synthetic) rope being used for toprails or midrails shall be inspected by a competent person as frequently as necessary to ensure that it continues to meet the strength requirements of paragraph (g) of this section.

1926.451(g)(4)(xv)
Crossbracing is acceptable in place of a midrail when the crossing point of two braces is between 20 inches (0.5 m) and 30 inches (0.8 m) above the work platform or as a toprail when the crossing point of two braces is between 38 inches (0.97 m) and 48 inches (1.3 m) above the work platform.
The end points at each upright shall be no more than 48 inches (1.3 m) apart.

1926.451(h)
"Falling object protection."

1926.451(h)(1)
In addition to wearing hardhats each employee on a scaffold shall be provided with additional protection from falling hand tools, debris, and other small objects through the installation of toeboards, screens, or guardrail systems, or through the erection of debris nets, catch platforms, or canopy structures that contain or deflect the falling objects. When the falling objects are too large, heavy or massive to be contained or deflected by any of the above-listed measures, the employer shall place such potential falling objects away from the edge of the surface from which they could fall and shall secure those materials as necessary to prevent their falling.

1926.451(h)(2)
Where there is a danger of tools, materials, or equipment falling from a scaffold and striking employees below, the following provisions apply:

1926.451(h)(2)(i)
The area below the scaffold to which objects can fall shall be barricaded, and employees shall not be permitted to enter the hazard area; or

1926.451(h)(2)(ii)
A toeboard shall be erected along the edge of platforms more than 10 feet (3.1 m) above lower levels for a distance sufficient to protect employees below, except on float (ship) scaffolds where an edging of 3/4 x 1 1/2 inch (2 x 4 cm) wood or equivalent may be used in lieu of toeboards;

1926.451(h)(2)(iii)
Where tools, materials, or equipment are piled to a height higher than the top edge of the toeboard, paneling or screening extending from the toeboard or platform to the top of the guardrail shall be erected for a distance sufficient to protect employees below; or

1926.451(h)(2)(iv)
A guardrail system shall be installed with openings small enough to prevent passage of potential falling objects; or

1926.451(h)(2)(v)
A canopy structure, debris net, or catch platform strong enough to withstand the impact forces of the potential falling objects shall be erected over the employees below.

1926.451(h)(3)
Canopies, when used for falling object protection, shall comply with the following criteria:

1926.451(h)(3)(i)
Canopies shall be installed between the falling object hazard and the employees.

1926.451(h)(3)(ii)
When canopies are used on suspension scaffolds for falling object protection, the scaffold shall be equipped with additional independent support lines equal in number to the number of points supported, and equivalent in strength to the strength of the suspension ropes.

1926.451(h)(3)(iii)
Independent support lines and suspension ropes shall not be attached to the same points of anchorage.

1926.451(h)(4)
Where used, toeboards shall be:'

1926.451(h)(4)(i)
Capable of withstanding, without failure, a force of at least 50 pounds (222 n) applied in any downward or horizontal direction at any point along the toeboard (toeboards built in accordance with Appendix A to this subpart will be deemed to meet this requirement); and

1926.451(h)(4)(ii)
At least three and one-half inches (9 cm) high from the top edge of the toeboard to the level of the walking/working surface. Toeboards shall be securely fastened in place at the outermost edge of the platform and have not more than 1/4 inch (0.7 cm) clearance above the walking/working surface. Toeboards shall be solid or with openings not over one inch (2.5 cm) in the greatest dimension.

In addition to the applicable requirements of 1926.451, the following requirements apply to the specific types of scaffolds indicated. Scaffolds not specifically addressed by 1926.452, such as but not limited to systems scaffolds, must meet the requirements of 1926.451.

1926.452(o)
"Single-point adjustable suspension scaffolds."

1926.452(o)(1)
When two single-point adjustable suspension scaffolds are combined to form a two-point adjustable suspension scaffold, the resulting two-point scaffold shall comply with the requirements for two-point adjustable suspension scaffolds in paragraph (p) of this section.

1926.452(o)(2)
The supporting rope between the scaffold and the suspension device shall be kept vertical unless all of the following conditions are met:

1926.452(o)(2)(i)
The rigging has been designed by a qualified person, and

1926.452(o)(2)(ii)
The scaffold is accessible to rescuers, and

1926.452(o)(2)(iii)
The supporting rope is protected to ensure that it will not chafe at any point where a change in direction occurs, and

1926.452(o)(2)(iv)
The scaffold is positioned so that swinging cannot bring the scaffold into contact with another surface.

1926.452(o)(3)
Boatswains' chair tackle shall consist of correct size ball bearings or bushed blocks containing safety hooks and properly "eye-spliced" minimum five-eighth (5/8) inch (1.6 cm) diameter first-grade manila rope, or other rope which will satisfy the criteria (e.g., strength and durability) of manila rope.

1926.452(o)(4)
Boatswains' chair seat slings shall be reeved through four corner holes in the seat; shall cross each other on the underside of the seat; and shall be rigged so as to prevent slippage which could cause an out-of-level condition.

1926.452(o)(5)
Boatswains' chair seat slings shall be a minimum of five-eight (5/8) inch (1.6 cm) diameter fiber, synthetic, or other rope which will satisfy the criteria (e.g., strength, slip resistance, durability, etc.) of first grade manila rope.

1926.452(o)(6)
When a heat-producing process such as gas or arc welding is being conducted, boatswains' chair seat slings shall be a minimum of three-eight (3/8) inch (1.0 cm) wire rope.

1926.452(o)(7)
Non-cross-laminated wood boatswains' chairs shall be reinforced on their underside by cleats securely fastened to prevent the board from splitting.

1926.452(p)
"Two-point adjustable suspension scaffolds (swing stages)."
The following requirements do not apply to two-point adjustable suspension scaffolds used as masons' or stonesetters' scaffolds. Such scaffolds are covered by paragraph (q) of this section.

1926.452(p)(1)
Platforms shall not be more than 36 inches (0.9 m) wide unless designed by a qualified person to prevent unstable conditions.

1926.452(p)(2)
The platform shall be securely fastened to hangers (stirrups) by U-bolts or by other means which satisfy the requirements of 1926.451(a).

1926.452(p)(3)
The blocks for fiber or synthetic ropes shall consist of at least one double and one single block. The sheaves of all blocks shall fit the size of the rope used.

1926.452(p)(4)
Platforms shall be of the ladder-type, plank-type, beam-type, or light-metal type. Light metal-type platforms having a rated capacity of 750 pounds or less and platforms 40 feet (12.2 m) or less in length shall be tested and listed by a nationally recognized testing laboratory.

1926.452(p)(5)
Two-point scaffolds shall not be bridged or otherwise connected one to another during raising and lowering operations unless the bridge connections are articulated (attached), and the hoists properly sized.

1926.452(p)(6)
Passage may be made from one platform to another only when the platforms are at the same height, are abutting, and walk-through stirrups specifically designed for this purpose are used.

1926.452(q)
"Multi-point adjustable suspension scaffolds, stonesetters' multi-point adjustable suspension scaffolds, and masons' multi-point adjustable suspension scaffolds."

1926.452(q)(1)
When two or more scaffolds are used they shall not be bridged one to another unless they are designed to be bridged, the bridge connections are articulated, and the hoists are properly sized.

1926.452(q)(2)
If bridges are not used, passage may be made from one platform to another only when the platforms are at the same height and are abutting.

1926.452(q)(3)
Scaffolds shall be suspended from metal outriggers, brackets, wire rope slings, hooks, or means that meet equivalent criteria (e.g., strength, durability).

1926.452(t)
"Interior hung scaffolds."

1926.452(t)(1)
Scaffolds shall be suspended only from the roof structure or other structural member such as ceiling beams.

1926.452(t)(2)
Overhead supporting members (roof structure, ceiling beams, or other structural members) shall be inspected and checked for strength before the scaffold is erected.

1926.452(t)(3)
Suspension ropes and cables shall be connected to the overhead supporting members by shackles, clips, thimbles, or other means that meet equivalent criteria (e.g., strength, durability).

1926.452(v)
"Multi-level suspended scaffolds."

1926.452(v)(1)
Scaffolds shall be equipped with additional independent support lines, equal in number to the number of points supported, and of equivalent strength to the suspension ropes, and rigged to support the scaffold in the event the suspension rope(s) fail.

1926.452(v)(2)
Independent support lines and suspension ropes shall not be attached to the same points of anchorage.

1926.452(v)(3)
Supports for platforms shall be attached directly to the support stirrup and not to any other platform.

This section supplements and clarifies the requirements of 1926.21(b)(2) as these relate to the hazards of work on scaffolds.

1926.454(a)
The employer shall have each employee who performs work while on a scaffold trained by a person qualified in the subject matter to recognize the hazards associated with the type of scaffold being used and to understand the procedures to control or minimize those hazards. The training shall include the following areas, as applicable:

1926.454(a)(1)
The nature of any electrical hazards, fall hazards and falling object hazards in the work area;

1926.454(a)(2)
The correct procedures for dealing with electrical hazards and for erecting, maintaining, and disassembling the fall protection systems and falling object protection systems being used;

1926.454(a)(3)
The proper use of the scaffold, and the proper handling of materials on the scaffold;

1926.454(a)(4)
The maximum intended load and the load-carrying capacities of the scaffolds used;

1926.454(a)(5)
Any other pertinent requirements of this subpart.

1926.454(b)
The employer shall have each employee who is involved in erecting, disassembling, moving, operating, repairing, maintaining, or inspecting a scaffold trained by a competent person to recognize any hazards associated with the work in question. The training shall include the following topics, as applicable:

1926.454(b)(1)
The nature of scaffold hazards;

1926.454(b)(2)
The correct procedures for erecting, disassembling, moving, operating, repairing, inspecting, and maintaining the type of scaffold in question;

1926.454(b)(3)
The design criteria, maximum intended load-carrying capacity and intended use of the scaffold;

1926.454(b)(4)
Any other pertinent requirements of this subpart.

1926.454(c)
When the employer has reason to believe that an employee lacks the skill or understanding needed for safe work involving the erection, use or dismantling of scaffolds, the employer shall retrain each such employee so that the requisite proficiency is regained. Retraining is required in at least the following situations:

1926.454(c)(1) construction workplaces covered under 29 CFR part 1926. Exception: The provisions of this subpart do not apply when employees are making an inspection, investigation, or assessment of workplace conditions prior to the actual start of construction work or after all construction work has been completed.

1926.500(a)(2)(i)
Requirements relating to fall protection for employees working on scaffolds are provided in subpart L of this part.

Regulations for Fall Protection

Contractors have the duty to provide a safe work place for employees. Numerous regulations and standards are in place to mandate this. Understanding these requirements is key to ensuring a safe work environment.

The Occupational Safety and Health Act (OSHA) under Title 29 of the Code of Federal Regulations (29 CFR) assures and enforces safe and healthful working conditions for general industry and construction in the United States. Under the Act, employers have the duty of providing their workers with a place of employment free from recognized safety and health hazards. It's the law.

The American National Standards Institute (ANSI) and the Canadian Standards Association (CSA) are voluntary organizations made up of manufacturers and consumers that establish product performance standards for fall protection safety. Meeting the standards indicates that products pass accepted testing procedures. The standards are not enforceable as law, however many OSHA regulations are adopted from ANSI standards.

OSHA Regulations Governing Construction—*www.osha.gov*
(29 CFR PART 1926)
Subpart E covers some requirements for personal protective equipment.

1926.104	Safety Belts, Lifelines and Lanyards
1926.105	Safety Nets

Subpart L covers scaffolds. 1926.450-454

Subpart M covers fall protection in its entirety and explains when and where fall protection systems are required and for what construction work activities. It also defines system component requirements.

1926.500	Scope, Application and Definitions
1926.501	Duty to Have Fall Protection
1926.502	Fall Protection Systems Criteria and Practices
1926.503	Training Requirements

Subpart R covers issues specific to steel erection.

1926.760	Fall Protection

Subpart X covers ladders. 1926.1053

OSHA Regulations Governing General Industry—*www.osha.gov*
(29 CFR PART 1910)
Subpart D mentions a few specific fall protection requirements relative to walking/working surfaces.

1910.27(d)(5)	Fixed Ladders – Ladder Safety Devices
1910.28(j)(4)	Safety Requirements for Scaffolding – Bosun's Chairs

Subpart F covers fall protection as it pertains to powered platforms, manlifts and vehicle-mounted work platforms.

1910.66	Powered Platforms for Building Maintenance
1910.66	Appendix C Personal Fall Arrest Systems

Subpart J covers general environmental controls in which confined spaces are addressed.

1910.146	Permit-Required Confined Spaces

Subpart R is for issues specific to special industries.

1910.268	Telecommunications
1910.269	Electric Power Generation, Transmission and Distribution

Additional Industry-Specific OSHA Regulations

1917	Marine Terminals
1918	Long Shoring

ANSI Standards—*www.ansi.org*

A10.8-2011	Scaffolding Safety Requirements
A10.11-2010	Safety Requirement for Personnel and Debris Nets
A14.3-2008	Ladder Safety Requirements
Z117.1-2003	Safety Requirements for Confined Space
Z359.1-2007	Safety Requirements for Personal Fall Arrest Systems, Subsystems and Components
Z359.6 (R2009)	Safety Requirements and Specifications for Personal Fall Arrest Systems
Z359.7 (R2011)	Qualification and Verification Testing for Fall Protection Products
Z359.13 (2009)	Safety Requirements for Lanyards and Energy Absorbers for Personal Fall Arrest Systems

CSA Standards—*www.csa.ca*

Z259.1-05 (R2010)	Body Belts and Saddles for Work Positioning and Travel Restraint
Z259.2.1-98 (R2011)	Fall Arresters, Vertical Lifelines and Rails
Z259.2.2-98 (R2000)	Self-Retracting Devices for Personal Fall Arrest Systems
Z259.2.3-12	Descent Devices
Z259.10-12	Full-Body Harnesses
Z259.11-05 (R2010)	Energy Shock Absorber and Lanyards
Z259.12-01 (R2008)	Connecting Components for Personal Fall Arrest Systems
Z259.13-04 (R2009)	Flexible Horizontal Lifeline Systems
Z259.14-12	Fall Restraint Equipment for Wood Pole Climbing

For all applicable regulations and standards covering fall protection, go to ***www.spiderstaging.com***

Forms, Applications & Documents

SALES ORDER

Date: _____

ORDER # _____

Sales Rep: Branch:

Cust #: _____ Ship to: _____

Cust Name: _____ Contact: _____

Address: _____ Address: _____

_____ _____

_____ _____

Contact: _____ Telephone: _____

Telephone: Fax:

PO #: _____ **Ship Date:** _____

Freight Carrier:

Part #	Description	Qty	UOM	Unit Price	Total
				SUBTOTAL:	

**Tax if applicable, will be added to invoice.

**Delivery not included unless otherwise specified.

Rental Contract Worksheet

QUOTE #: _____ QUOTE DATE: _____
CUSTOMER NAME: _____
BILLING ADDRESS: _____
PHONE #: _____ FAX #: _____
SALES ORDER W/RENTAL ORDER? YES NO
PACKAGE DESCRIPTION FOR INVOICE: _____
SHIP DATE: _____ PO#: _____
SALESMAN #: _____ BRANCH: _____
WILL CALL? SHIP TO: _____
SHIP TO CONTACT: _____
CONTACT PHONE #: _____

RIGGING SVCS WORK ORDER ATTACHED? YES
RATE PER STAGE: _____
QUANTITY OF STAGES: _____

HOISTS (CIRCLE UNIT TYPE)

· 9005R-SC1000 · 700783-1R-ZMAC · SC40R-1000# · 9015R · 9045R
· 99115R- SC401500#1ph. · 99135R- SC401500#3ph · SC30R · 90025R-SC1000AIR
· 701127-1RAIR-Z · ST-17R · ST-19AR · ST-26R · ST-18R · ST-180R
· ST-180-1R · ST-180-5R · ST-27R · ST-19ER

QTY	PART NUMBER	DESCRIPTION
	700956-1R	TANG- ZMAC
	8-0406	20" ADAPTER- SC1000
	2-731	A-FRAME, SC1000
	700958-1	A-FRAME FOR ZMAC
	BB-002	LONG FRAME
	BB-004	SHORT FRAME
	SA-1072R	GROUND DOLLY- ALUM
	A-10428R	GROUND DOLLY- STEEL
	701018-1R	ZMAC COVER, POLY
	700784-1R	ZMAC COVER, CANVAS
	94-001R	SC30/40 COVER
	93-001	CROSSBEAM ASSY
		PLATFORMS & ACCESSORIES
	MKD106196	FOLD-UP WORKCAGE
	700903-1R	DEMOUNTABLE WORK CAGE
	701086-1R	STEEL WORKCAGE
	P-00130	LISBON FOLDING CAGE
	9-73R	BOSUN'S CHAIR
	4986-01R	MOD CASTERS
	700755-1R	3' MOD PLATFORM
	4968R	5' MOD PLATFORM
	4969R	10' MOD PLATFORM
	8999R	1' MOD PLATFORM
	4970R	CONNECTOR ASSY
	4971R	ADAPTER STIRRUP
	008810-1R	WALK THRU STIRRUP
	008812-1R	CORNER ADAPTER
	701120-1R	FIXED FACE ROLLERS
	SA-1090R	48" WALL ROLLERS
	3679R	FACE ROLLER 3
	3680R	FACE ROLLER 4
	3681R	FACE ROLLER 5
	SA-1045R	RAIL CLAMPS
	701023-1R	MOD P-FORM ROLLER ASSY
	A-00346-1R	PARC CLAMP (PLANKS ONLY)
	701020-1R	FACE ROLLER CLAMP MOD PLATFORM
	701027-1R	CLAMP ASSY; FACE ROLLER; WORK CAGE
	SA-1050R	2ft FLYDECK
	SA-1051R	3ft FLYDECK
	1366-001R	SINGLE FLY CABLE
		WIRE ROPES & TIEBACKS
	1329- ____R	5/16" FIBER CORE WIRE ROPE
	700939-____R	5/16" IWRC
	700939-____R	5/16" IWRC
	SA-5001-____R	TIE BACK CABLE_____
	SA-5001-____R	TIE BACK CABLE_____ ft
	157501R / 157502R	TURNBUCKLE, 3-4" (-01R), or 1" (-02R)
	A-00672-5R	THIMBLE EYE, 5/16"
	A-00672-6R	THIMBLE EYE, 3/8"
	233740R	FIST GRIP
	557026R	5/8" SHACKLE
	701464-1R	STIRRUP BAR (ZEMLIN ADAPTER)
		ELECTRIC
	3660- ____R	10/3 EC 220V
	3660- ____R	10/3 EC 220V
	103020R	PLUG ADAPTER
	3661- ____R	10-3 EC 110V
	SA-3660-1R	ELEC. YOKE 220V (40')
	SA-3660-2R	ELEC. YOKE 220V Extension
	SA-3661-1R	____FT ELEC. YOKE 110V
	700786-1R	REMOTE, ZMAC _____Ft.
	700908-1R	REMOTE ADAPTER
	701602-1R	ADAPTOR, REMOTE SC1000
	590003R	2.0 KVA TANSFORMER W/GFI
	590005R	3.0 KVA TANSFORMER W/GFI
	590011R	1.5 KVA BOOSTER
	590012R	2 KVA BOOSTER
	590020R	1.5 KVA 110V to 220V
	590021R	2 KVA 110V to 220V
	SA-3660R	PIGTAIL, 220V RENTAL

QTY	PART NUMBER	DESCRIPTION
		AIR
	8-0107R	OILER/FILTER AIR ZMAC
	8-0108R	SC1000/SC30 FILTER LUBRICATOR
		MKD / Modulo
	MKD____FTR	5 - 40 ft. MKD STAGE KITS
	MKD009R	WALL ROLLER
		WELD PROTECTION
	701151-1R	STAGE GROUND
	4485-001R	ARC GUARD TOP SECTION
	1581-001R	ARC GUARD MIDDLE SEC.
	701301-1R	ARC GUARD BOTTOM SEC. SC30
	701301-2R	ARC GUARD BOTTOM SEC. ZMAC
	3358R	DRUM PROTECTOR 235 FT ST-26
	700947-001R	DRUM PROTECTOR 350 FT
	701074-1R	INSULATED THIMBLE; SEIZE 30 ft
	701074-2R	INSULATED THIMBLE; Flemish Eye
	701074-3R	INS. THIMBLE ASSY; CLIP
		RIGGING ACCESSORIES
	-1003R	I-BEAM ROLLER 16"
	SA-1003-22R	I-BEAM ROLLER 22"
	SA-1039R	I-BEAM CLAMP 4"
	SA-1040R	I-BEAM CLAMP 8"
	700558-12-1R	CORNICE HOOK 12"
	700558-21-1R	CORNICE HOOK 21"
	700770-1R	PARAPET HOOK 13"
	700772-1R	PARAPET HOOK 20"
	700773-1R	PARAPET HOOK 27"
	700583-1R	STAND-OFF BRACKET
	700751-1R	16' ALUM. OUTRIGGER - TUBE KIT
	700748-001R	16FT. REAR BEAM
	700749-001R	16FT. FRONT BEAM
	700750-001R	16FT. SPLICE TUBE
	1260-001R	16FT WEIGHT BAR
	8-0217-6R	16 FT. 5 X 5 OUTRIGGER KIT
	8-0217-5R	25 FT. 5 X 5 OUTRIGGER KIT
	8-0217-1R	5X5 O/R FRONT BEAM
	8-0217-2R	5X5 O/R CENTER BEAM
	8-0217-3R	5X5 O/R SPLICE TUBE, 3ft.
	8-0217-4R	5X5 O/R SPLICE TUBE, 9ft.
	8-0285R	5X5 O/R COUNTERWEIGHT BAR
	A-00343-1R	"H" PLATE
	A-00343-2R	"H" PLATE
	A-00343-3R	"H" PLATES 5X5
	SA-10842R	OUTRIG SUPPORT STAND
	SA-3728R	ROLLING OUTRIGGER (OLD)
	A-11393R	OBS FRAME
	A-11384R	CROSS BRACE 7'
	A-11389R	CROSS BRACE 10'
	A-11395R	CROSS B
	700809-1R	24" BOX BEAM (.25 WALL)
	A-11394R	8" CASTER
	A-11835R	12" CASTER
	A-11387R	SCREW JACK W/ SOCKET
	A-11397R	BASE PLATE W/SCREW JACK
	SA-10843R	50# COUNTERWEIGHT
	700525-1R	TANK TOP ROLLER
	8-0044R	PARAPET CLAMP 1500 LB
	9-92R	PARAPET CLAMP1000 LB
	157514R	CHOKER 4 / 6 / 8 ft.
	701960-1R	ROLLING OUTRIGGER STAND
	701960-2R	ROLLING OUTRIGGER FRAME
		MATERIAL HANDLING
	702058-1R	MATERIAL HOIST FRAME KIT
	702064-1R	MATERIAL HOIST ELECTRICAL SET
	702062-1R	SHEAVE TAILBOARD, BLOCK
	702067-1R	END STOP ASSEMBLY
		MISCELLANEOUS
	8999R	MINI GREEN STAND

Spider®
A Division of Safeworks, LLC

Credit Application

Spider
365 Upland Drive
Seattle, WA 98188
Phone: (206) 574-0292
Fax: 866-467-9233

Company Information

Company Legal Name		DBA Name	
Street Address	City	State	Zip
Mailing Address	City	State	Zip
Phone No	Fax No.	web site URL	
Tax ID No.	Dun & Bradstreet No.		No. of Employees
Type of Business:	SIC/NAICS No.	How Long in Business?	

Business Form (Check One): **Proprietorship** ☐ **Limited Liability Company** ☐ **Corporation** ☐ **Other** ☐ _____

Officers

Name	Title	Name	Title
Address:		Address	
Phone	SSN	Phone	SSN

Company Bonds

Type of Bonds	Surety Company	Date of Issuance	Bond No.
Performance Bond			
Payment Bond			
Statutory Contractor Bond			

Credit References (1 Bank + 3 Trade References Required)

Bank Name		Name	
Address		Address	
Telephone Number:	Account Number:	Telephone Number:	Fax:
Name		Name	
Address		Address	
Telephone Number:	Fax:	Telephone Number:	Fax:

Has the Company or any of its owners or officers filed Bankruptcy Either as a Business or Individually within the last seven years? **Yes** **No**
If yes, please state the name of bankrupt entity or person, date(s) of bankruptcy and the State or jurisdicition the Bankruptcy was filed.

Agreement

Agreement: We herein make application to Spider, A Division of SafeWorks, LLC for credit. If credit is granted, we promise to pay all invoices within 30 days. In the event payment is not made and this account it turned over to an outside party for collections, we agree to pay all costs (including legal fees and court expenses) of collection. The applicant hereby agrees to pay interest at 1 1/2 % per month, or 18% annually (or the highest legal rate if less) on said unpaid balance over 60 days after the date of invoice. Permission is granted to Spider to verify the information with outside parties whose names are herein provided. No other terms of payment shall apply unless defined in writing and signed by both the applicant and representative of Spider, A Division of SafeWorks, LLC.

Signature Name Title Date

Signatures of Officers/Owners as to Consent, Obtain Consumer Credit Application

Signature Name Title Date

In consideration of credit being granted, the undersigned agrees to unconditionally guarantee payment of all sums owed by the applicant pursuant to this agreement and further agrees to its terms.

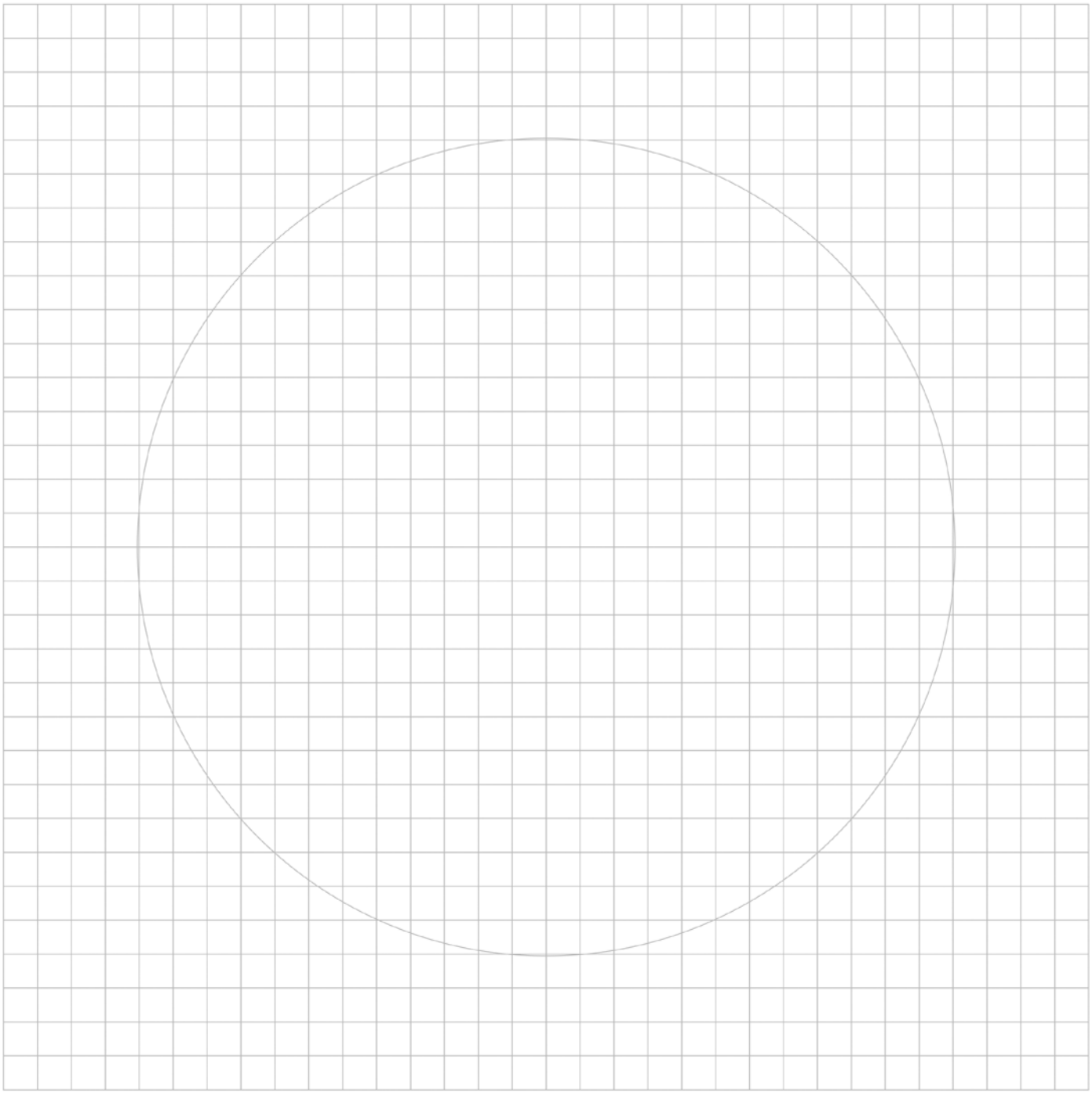
_____
(Personal Guarantor)

Spider®

Date _____
Customer/POC _____
Phone Number _____
Date Required _____
Job Site Name _____
Onboard Task _____
Purchase/Rental _____
From _____
Branch _____

Rigging _____
Hoist Model _____
Platform Type _____
Length _____
Face Rollers _____
Load Rating _____
PFAS type _____
Tieback to _____
Drop Height _____

Describe Your Application Below (include building dimensions, available power etc.)



Standard Terms & Conditions

This lease of equipment by Spider, a Division of SafeWorks LLC, ("Spider") to the Customer ("Customer") is subject to these Terms and Conditions on the Spider Rental Agreement. This Agreement sets forth the entire and exclusive agreement between the parties regarding the leased equipment.

Buyer's Credit and Payment. Payment of Spider invoices is due 30 days from Customer's receipt of invoice. Finance charges of 1-1/2% per month (18% per annum) will be added to all amounts past due. Customer shall be responsible for the payment of all taxes (whether sales, use, excise, or similar tax). **Customer shall pay Spider the rental rates listed in the Spider Rental Contract Agreement from the time the equipment leaves the Spider location, ending only when the equipment is received by Spider personnel at the location from which the equipment was rented during normal business hours.**

Default and Termination. Customer shall be in default of this Agreement if any payment becomes delinquent; if Customer's financial status becomes unacceptable to Spider; or if Customer fails to comply with all terms and conditions of this Agreement. Upon default, Spider may: (a) suspend delivery; (b) terminate this Agreement; (c) enter the equipment location and take immediate possession of and remove the equipment, at customer's expense, all without liability to Spider for or by any reason of damage to property or such entry or taking possession.

Delivery. Unless otherwise noted in this Agreement, equipment delivery and return expenses shall be charged to Customer. Spider shall not be liable for delays in delivery or performance. In no event shall Spider be liable for liquidated, special, punitive, consequential, incidental damages or penal damages including, but not limited to, loss of profit or revenues, to any party, for any reason whatsoever. Customer shall inspect and count the equipment upon receipt, and immediately notify Spider of any discrepancies. If no discrepancies are noted, Customer accepts Spider's indication of readiness for use and count as final.

Return of Equipment. Customer is responsible for all shortages and damaged equipment. If the equipment is returned to Spider with damage beyond normal wear and tear, Customer agrees to pay all expenses necessary to return the equipment to its original condition. Lost or severely damaged equipment will be charged to Customer at replacement prices in Spider's retail price list.

Title, Use and Condition. The equipment provided to Customer under this Agreement is the sole and exclusive property of Spider at all times during and after the term of the Agreement. Customer will make no alterations, additions, improvements or repairs to the equipment without the prior written consent of Spider. Customer shall inspect the equipment upon receipt and immediately notify Spider in writing of any equipment defect, malfunction or disrepair. Customer agrees to be the absolute insurer of the equipment for all risks, including but not limited to loss, damage, destruction, wind, fire, and theft, until the equipment is returned to Spider.

Indemnification. To the extent of Customer's negligence, Customer agrees to defend, indemnify and hold harmless Spider, its parent company, subsidiaries, affiliates and their officers, directors, employees and agents from any and all claims, actions, suits, proceedings, costs, expenses, damages, and liabilities, including cost of suits and reasonable attorney's fees, arising out of or connected with the operation, use or possession of equipment by Customer. Customer's duty of indemnification and defense shall extend to its subcontractors of any tier, their agents, or anyone for whose acts they may be liable.

Accidents. Customer agrees to notify Spider of any accidents or injuries involving Spider equipment immediately following any such occurrence. Spider shall have the right to demand the immediate return of any Spider owned equipment, unless prohibited by law.

Standard Terms & Conditions
(continued)

Equipment Use and Safety Equipment. Customer acknowledges that using or possessing the equipment may expose Customer and other individuals to risks of damage to property, loss of property, serious injury, disability and death. Customer agrees to handle and use the equipment in a safe and proper manner in conformity with all laws and ordinances, including Federal and State standards and in accordance with the SIA Code of Safe Practices and Spider Operator's Manual. Copies of the Code of Safe Practices and Spider Operator's manual will be provided by Spider upon request by Customer. Should the equipment or any part thereof become unsafe, in a state of disrepair, or not in good operating condition, Customer shall immediately notify Spider and cease all operation of the equipment. Customer is not authorized to make repairs to equipment. Spider shall have no responsibility, direction, or control over the manner of Customer's use or operation of equipment, unless expressly provided herein. Customer acknowledges that it will require all operators of the equipment to use applicable fall protection and all other safety equipment required for the safe operation of the equipment, and that the equipment will only be used by competent and duly trained and qualified employees of Customer. Customer shall allow Spider free access to the equipment in the possession of Customer for the purpose of inspection or service, and observing its actual use or operation.

No Warranty. SPIDER DISCLAIMS AND EXCLUDES ALL WARRANTIES WHETHER EXPRESS, IMPLIED, OR STATUTORY INCLUDING ANY WARRANTY OF MERCHANTABILITY, ANY WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE, ANY WARRANTY FOR DESIGN, CONDITION, CAPACITY, DURABILITY, QUALITY, AND ANY IMPLIED WARRANTIES OTHERWISE ARISING FROM COURSE OF DEALING, COURSE OF PERFORMANCE, OR USAGE OF TRADE.

Severability. The provisions of this Agreement shall be severable so that any invalidity, unenforceability, or waiver of any of the provisions shall not affect the remaining provisions. This Agreement shall be governed by and construed in accordance with the laws of the state where the equipment is rented.

Hoist Warranty

Spider, a division of SafeWorks, LLC warrants all parts manufactured by it and sold under this agreement to be free from defects in materials and workmanship for a period of TWO YEARS from the date of shipment. Accessories or equipment furnished by Spider but manufactured by others carry the warranty conveyed by the manufacturer to Spider, providing such warranty is transferable.

This warranty does not cover normal wear and tear, consumable items, or part failures caused by accident, abuse or failure to follow Spider's recommended operation and maintenance procedures.

Labor is the responsibility and expense of the Buyer, except if the hoist is returned to the factory freight prepaid and Spider has established the part(s) to be defective. The liability of Spider under this warranty is limited, at Spider's sole option, to repair or replace with equivalent parts. **No other warranties are expressed or implied, and in no event shall Spider be liable for delay caused by defects, for consequential damages, or for any charges or expenses of any nature incurred without its written consent.**

This warranty is conditioned upon (a) Spider being notified in writing by Buyer within one month after discovery of defects; (b) the return of defective articles to Spider, transportation charges prepaid by Buyer; and (c) Spider's examination of such article disclosing to its satisfaction that such defects were not caused by negligence, misuse, improper maintenance, improper installation, accident, or unauthorized repair or alteration. The original warranty period of any article that has been repaired or replaced by Spider shall not thereby be extended.

Rental Equipment Guide

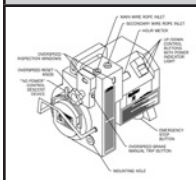
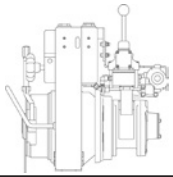
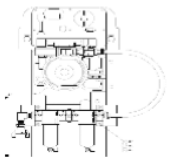
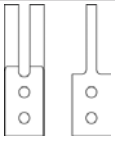
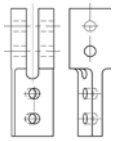
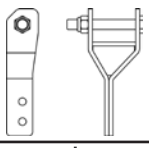
Image	Category	Part Number	Description English	Description Spanish
	Hoist	700783-1R	Electric Zmac	Montacarga Zmac Electrica
	Hoist	701127-1R	Air Zmac	Montacarga Zmac de Aire
	Hoist	8-0107R	Oiler/filter for Air	Filtro/Engrasador de Aire
	Hoist	SC30R	SC30 Air Hoist	Montacarga de aire Modelo SC30
	Hoist	ST-17R	ST-17 Air Basket	Canasta de Aire Modelo ST-17
	Hoist	ST-26R	ST-26 Air Basket	Canasta de Aire ST-26
	Hoist	ST-19AR	ST-19 Demountable Air Basket	Canasta Desmontable de Aire Modelo ST-19A
	Hoist	ST19ER	ST-19 Demountable Electric Basket	Canasta esmontable Electrica Modelo ST-19E
	Hoist	ST-18R	ST-18	Canasta Electric Modelo ST-18

Image	Category	Part Number	Description English	Description Spanish
	Hoist	ST-180R	ST-180 Electric Basket	Canasta Electrica Modelo ST-180
	Hoist	SC40R	1000 lb. SC40	Montacarga Electrica Modelo SC40, capacidad de 1,000 lb
	Hoist	99115R	1500 lb. SC40	Montacarga Electrica Modelo SC40, capacidad de 1,500 lb
	Hoist	9005R	SC1000 208V 1 Ph	Montacarga Electrica Modelo SC1000, capacidad de 1,000 lb, monofásico
	Hoist	9015R	SC1500 1 Ph	Montacarga Electrica Modelo SC1000, capacidad de 1,500 lb, monofásico
	Hoist	9035R	SC1500 3 Ph	Montacarga Electrica Modelo SC1000, capacidad de 1,500 lb, trifásico
	Hoist	9026R	SC1000 Air	Montecarga de Aire, Modelo SC1000
	Platforms & Accessories	8-0278R	90° Adapter	Adaptador de 90°
	Platforms & Accessories	8-0406R	20° Adapter	Adaptador de 20°
	Platforms & Accessories	700956-1R	Tang	Adaptador de ZMAC
	Platforms & Accessories	9-73R	Bosun chair	Silla Guindola

* Parent part number of kit

Rental Equipment Guide
(continued)

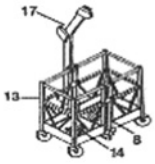
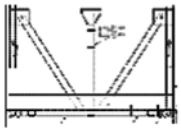
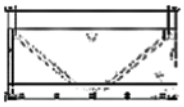
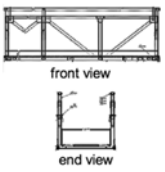
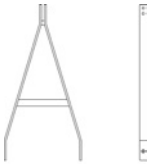
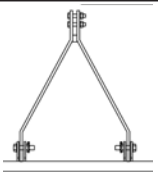
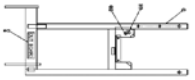
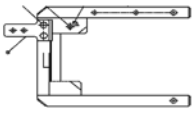
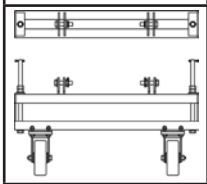
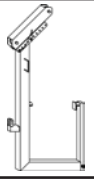
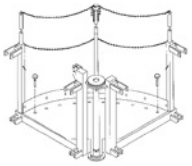
Image	Category	Part Number	Description English	Description Spanish
	Platforms & Accessories	700903-1R	Demountable workcage	Canasta Desmontable
	Platforms & Accessories	P-00130R	Folding workcage, Lisbon	Canasta Plegadiza Modelo Lisbon
	Platforms & Accessories	*MKD106196R	Fold-up workcage, Sky Climber	Canasta Plegadiza Modelo Sky Climber
	Platforms & Accessories	701086-1R	Steel workcage	Canasta De Acero
	Platforms & Accessories	700755-1R	3' Mod platform	Plataforma desección de 3 pies
	Platforms & Accessories	4968R	5' Mod platform	Plataforma de sección de 5 pies
	Platforms & Accessories	4969R	10' Mod platform	Plataforma de sección de 10 pies
	Platforms & Accessories	4970R	Connector assy	Conector de plataformas
	Platforms & Accessories	4971R	Adapter stirrup	Estribo de extremos con ruedas

Image	Category	Part Number	Description English	Description Spanish
	Platforms & Accessories	700958-1R	A-Frame for Zmac	Estribo de Montacargas Modelos Zmac
	Platforms & Accessories	2-731R	A-Frame stirrup assembly for SC1000	Estribo de Montacargas Modelos SC1000
	Platforms & Accessories	BB-002R	Long frame	Estribo Largo de Montacargas Modelos SC30 y SC40
	Platforms & Accessories	BB-004R	Short frame	Estribo Bajo de Montacargas Modelos SC30 y SC40
	Platforms & Accessories	* 93-001R	Crossbeam assy	Presilla de extremos ajustable con ruedas
	Platforms & Accessories	* 008810-2R	Walk thru stirrup	Estribo Andador
	Platforms & Accessories	008811-2R	End gate	Ensamblaje de Compuerta de Extremo
	Platforms & Accessories	008812-1R	Corner adapter	Adaptador de esquina
	Platforms & Accessories	700784-1R	Zmac cover-canvas	Cubierto de Lona para Montecarga Zmac

* Parent part number of kit

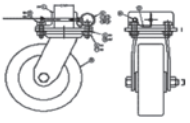
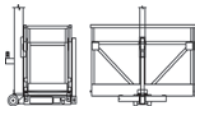
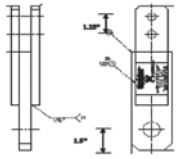
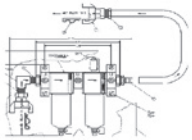
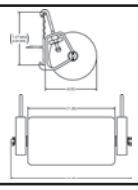
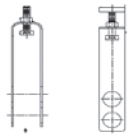
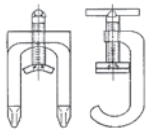
Image	Category	Part Number	Description English	Description Spanish
	Platforms & Accessories	701018-1R	Zmac cover-poly	Cubierto Plastico para Montecarga Zmac
No image available	Platforms & Accessories	94-001R	SC30/40 cover	Cubierto de Montecarga Modelo SC40/SC30
	Platforms & Accessories	9970R	SC1000/ SC1500 cover	Cubierto de Montecarga Modelo SC1000
No image available	Platforms & Accessories	ALUM-R	Alum plank, l' x w'	Plancha de Aluminio
	Platforms & Accessories	4986-01R	Caster assembly; mod platform w/ pin	Rueda de plataforma modular
	Platforms & Accessories	*701184-1R	Single-line walk thru kit	Sistema de convertir una plataforma de 3 ó 5 pies en una guindola con un motor.
	Platforms & Accessories	701464-1R	Stirrup bar	Barra para Estribo
	Platforms & Accessories	*8-0108R	SC1000/Zmac filter lubricator	Filtro de Aceite del SC1000
	Platforms & Accessories	*9-3R	Stirrup assy	Sistema de partes # 2-73 y 93-001

Image	Category	Part Number	Description English	Description Spanish
	MKD2	* MKD___ FTR	5-40 ft stage kits	Plataforma Desmontable Modelo MKD2; 5-40 pies
	Wall Rollers	SA-1090R	48" Wall roller	Rodillo de fachada; 48"
	Wall Rollers	701120-1R	Fixed face roller	Rodillo de fachada de pinza; plataforma modular
	Wall Rollers	3679R	Face roller, 3	Rodillo de fachada; 3 rodillos
	Wall Rollers	3680R	Face roller, 4	Rodillo de fachada; 4 rodillos
	Wall Rollers	3681R	Face roller, 5	Rodillo de fachada; 5 rodillos
	Wall Rollers	701023-1R	Mod platform roller assy	Rodillo de Esponja; plataforma modular
	Wall Rollers	A-00346-1R	Parc clamp (planks only)	Grapa de plancha
	Wall Rollers	SA-1045R	Rail clamp	Grapa de riel; de rodillo

* Parent part number of kit

Rental Equipment Guide
(continued)

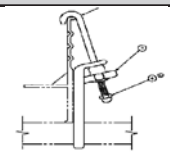
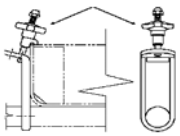
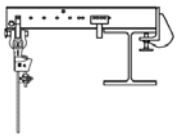
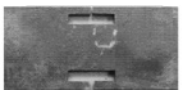
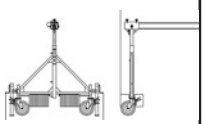
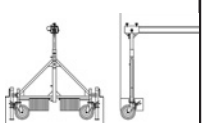
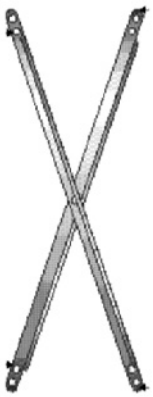
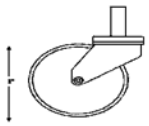
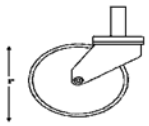
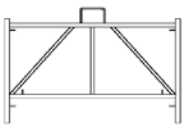
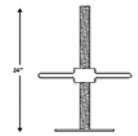
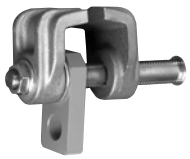
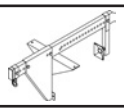
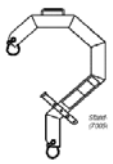
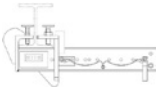
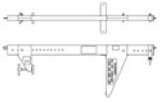
Image	Category	Part Number	Description English	Description Spanish
	Wall Rollers	701020-1R	Mod face roller clamp	Grapa de riel de plataforma; de rodillo
	Wall Rollers	5020-01R	Boat roller	Rodillo de Esponja
	Wall Rollers	701027-1R	Clamp assy; face roller work cage	Grapa De Riel de canastas
	Wall Rollers	MKD009R	MKD2 wall roller	Rodillo modelo MKD
	Outriggers	SA-10842R	Outrigger support stand	Pedestal de Soporte Ajustable
	Outriggers	4474R	Truss outrigger assembly	Viga de Celosía
	Outriggers	SA-10843R	50 lb counterweight	Contrapesas
	Outriggers	701960-1R	Rolling outrigger gantry with casters	Portíco para viga voladiza 8-0217-5R/-6R/-7R con ruedas
	Outriggers	701960-2R	Outrigger gantry with screwjacks	Portíco para viga voladiza 8-0217-5R/-6R/-7R con tornillo y base

Image	Category	Part Number	Description English	Description Spanish
	OBS Frame Tower	A-11384R	7 ft cross brace	Refuerzo Transversal' 7'
	OBS Frame Tower	A-11389R	10 ft cross brace	Refuerzo Transversal; 10'
	OBS Frame Tower	A-11395R	12 ft cross brace	Refuerzo Transversal; 12'
	OBS Frame Tower	A-11394R	8" caster	Rueda de Armazón de Torre; 8"
	OBS Frame Tower	A-11835R	12" caster	Rueda de Armazón de Torre; 12"
	OBS Frame Tower	A-11387R	Screw jack	Gato de Tornillo
	OBS Frame Tower	A-11393R	OBS frame (4'H x 5'W)	Armazón de Torre
	OBS Frame Tower	A-11397R	Base plate w/ screw jack	Tornillo con Placa de base
	Rigging Accessories	SA-1002R	Transfer chain	Cadena de transferencia
	Rigging Accessories	SA-1003R	I-beam roller, 16"	Rodillo De Viga "I"; 16"
	Rigging Accessories	SA-1003-22R	I-beam roller, 22"	Rodillo De Viga "I"; 22"

* Parent part number of kit

Image	Category	Part Number	Description English	Description Spanish
	Rigging Accessories	SA-1039R	I-beam clamp, 4”	Pinza Ajustable De Viga; 4”
	Rigging Accessories	SA-1040R	I-beam clamp, 8”	Pinza Ajustable De Viga; 8”
	Rigging Accessories	700770-1R	Parapet hook, up to13”	Gancho de Parapeto; hasta 13”
	Rigging Accessories	700772-1R	Parapet hook, 14-20”	Gancho de Parapeto; 14-20”
	Rigging Accessories	700773-1R	Parapet hook, 21-27”	Gancho de parapeto; 21-27”
	Rigging Accessories	9-92R	Parapet clamp, 1000 lb	Pinza de Aluminio de parapeto; 1000 lns.
	Rigging Accessories	8-0044R	Parapet clamp, 1500 lb	Pinza de Aluminio de parapeto; 1500 lns.
	Rigging Accessories	N/A	“L” beam	Viga de “L”
	Rigging Accessories	704241-1R	Max reach assy	Kit de extensión máxima
	Rigging Accessories	704241-2R	Max reach for use with 701960-1	Kit de extensión máxima para su uso con 701960-1
	Rigging Accessories	* 701135-1R	C-beam (48” height x 44” reach)	Viga de “C”
	Rigging Accessories	700525-1R	Tank top roller	Rodillo de Acero de tanque/de-pósitos de petróleo.
	Rigging Accessories	157500/01/02R	Turnbuckle __ in.	Tensor
	Rigging Accessories	157514R	Wire rope choker	Amarra de Cable de Alambre
	Rigging Accessories	700558-12-1R	13” Cornice hook	Gancho de Cornisa; 13”
	Rigging Accessories	700558-21-1R	20” Cornice hook	Gancho de Cornisa; 21”

* Parent part number of kit

Image	Category	Part Number	Description English	Description Spanish
	Rigging Accessories	1366-001R	Single fly cable	Cable de Plataforma lateral.
	Rigging Accessories	702096-1R	Beam Tie-Down Assembly	Ensamble de amarre para viga
	Rigging Accessories	702554-1R	Bottom Flange Truss Outrigger	Viga de suspension con amarre de base inferior
	Rigging Accessories	701877-1R	Corner Support Post	Poste de apoyo para esquinas
	Rigging Accessories	701878-1R	Counter-weight Beam Sling	Cable de soporte de amarre para viga de contrapesas
	Rigging Accessories	702396-1R	Extended Parapet Clamp	Prensa para borde de paret de ajuste extendido
no image available	Rigging Accessories	701881-1R	H-Plate Assembly	Plato de suspension tipo H
	Rigging Accessories	704099-1R	Post Shore System	Poste de retencion de viga de suspension
	Electric Needs	SA-3660R	Pigtail 220V	Conexión de Panel electrico
	Electric Needs	3660-R	10/3 EC 220V power cord	Cuerda Electrica; 220v

Rental Equipment Guide
(continued)

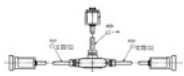
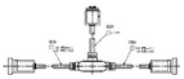
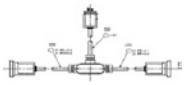
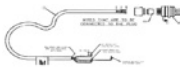
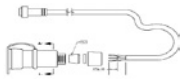
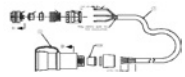
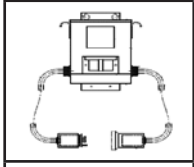
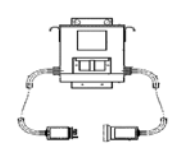
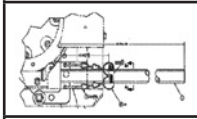
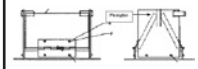
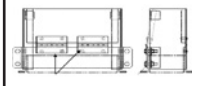
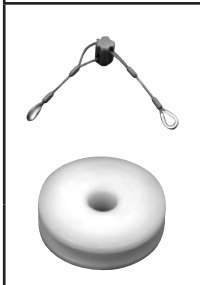
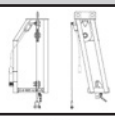
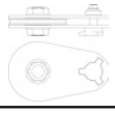
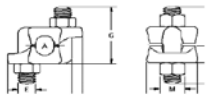
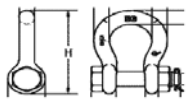
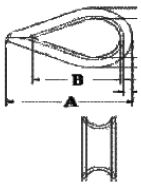
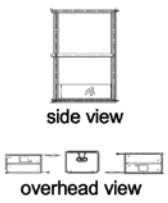
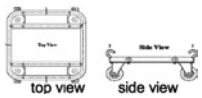
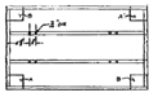
Image	Category	Part Number	Description English	Description Spanish
	Electric Needs	3661-R	10/3 EC 125 V power cord	Cuerda Electrica; 110v
	Electric Needs	SA-3660-1R	__ ft elec. yoke 220V	Yugo Electrico; 220v
	Electric Needs	SA-3660-2R	Yoke extension	Extención; Yugo electrico
	Electric Needs	SA-3661-1R	10/3 electrical yoke 110V	Yugo Electrico; 110v
	Electric Needs	700786-1R	Remote for Zmac __ ft	Control Remoto de Zmac
	Electric Needs	701602-1R	SC1000 remote adapter for 700786-1	Control Remoto de SC1000
	Electric Needs	700908-1R	Zmac remote adapter	Adaptador; Control remoto de Zmac
	Electric Needs	103020R	Plug adapter	Adaptador de Enchufle
	Transformers	590002R	1.5 KVA w/ GFI	Transformador; 1.5 KVA con ICFT/ Interruptor de Circuito con Conexión a Tierra
	Transformers	590012R	2 KVA	Transformador; 2 KVA; Aumento de potencia.

Image	Category	Part Number	Description English	Description Spanish
	Welding Needs	701151-1R	Stage ground	Conexión a Tierra Magnetico
	Welding Needs	4485-001R	Arc guard top section	Proteción de Arco de Soldadura; Parte Superior
	Welding Needs	1581-001R	Arc guard middle section	Proteción de Arco de Soldadura; Parte Central
	Welding Needs	701301-1R	Arc guard bottom section SC30	Proteción de Arco de Soldadura; Parte Inferior; SC30
	Welding Needs	701301-2R	Arc guard bottom section Zmac/SC1000	Proteción de Arco de Soldadura; Parte Inferior; Zmac
	Welding Needs	3358R	Drum protector 235 ft ST-26	Proteción de Arco de Soldadura; Parte Inferior; ST-26
	Welding Needs	700947-001R	Drum protector 350 ft	Proteción de Arco de Soldadura; Parte Inferior; 350’
	Welding Needs	701074-1R	Insulated thimble assy - seize end	Casquillo Insulador; sin terminación
	Welding Needs	701074-2R	Insulated thimble assy - thimble end	Casquillo Insulador; terminación de vuelta acero.
	Welding Needs	701074-3R	Insulated thimble assy - clip	Casquillo Insulador; terminación de broche
	Welding Needs	4897R	Insulator assy	Insulador
	Outriggers	700809-1R	24 ft box beam (.25 wall)	Viga Voladiza Portátil; aluminio; cuadrado; 24 pies
	Outriggers	700819-1R	30 ft box beam	Viga Voladiza Portátil; aluminio; cuadrado; 30 pies
	Outriggers	8-0217-6R	5 x 5 outrigger 16’ (66” outreach)	Viga Voladiza Portátil; aluminio; 16 pies con alcance de 66 pulgadas
	Outriggers	8-0217-7R	5 x 5 outrigger 22’ (66” outreach)	Viga Voladiza Portátil; aluminio; 22 pies con alcance de 66 pulgadas
	Outriggers	8-0217-5R	5 x 5 outrigger 25’ (66” outreach)	Viga Voladiza Portátil; aluminio; 25 pies con alcance de 66 pulgadas

* Parent part number of kit

Image	Category	Part Number	Description English	Description Spanish
	Material Handling	702058-2R	Material hoist frame kit	Estribo de Montacarga de Material
	Material Handling	702064-1R	Material hoist electrical set	Sistema Eléctrico del Montacarga de Material
	Material Handling	702067-1R	End stop assembly	Terminacíon (Tope Fínal) para la viga 8-0217-5R/-6R/-7R
	Material Handling	702070-1R	Sheave tailboard block	Polea para Montacargas de Material de 2000 libras de capacidad
	Wire Ropes	1329-R	5/16" Fibercore	Cable de alambre centro de fibra
	Wire Ropes	700939-R	5/16" IWRC	Cable de alambre IWRC; centrode alambre de acero
	Wire Ropes	233740R	Fist grips	Grapa/Pinza de Cables de Acero
	Wire Ropes	557026R	5/8" Shackle	Grillete; 5/8”
	Wire Ropes	SA-5001R	Tie back cable	Cables de seguridad de emergéncia
	Wire Ropes Accessories	A-00672-5R	Thimble eye; 5/16"	Ojo de metal de 5/16” de cables de acero.
	Wire Ropes Accessories	A-00672-6R	Thimble eye; 3/8"	Ojo de metal de 3/8” de cables de acero.
	Drum Hoist Accessories	SA-1050R	2' Flydecks	Plataforma lateral; 2' or Extension de canasta; 2'
	Drum Hoist Accessories	SA-1051R	3' Flydecks	Plataforma lateral; 3' or Extension de canasta; 3'
	Drum Hoist Accessories	SA-1072R	Ground dolly	Plataforma Rodante; Caruaje de Aluminio
	Drum Hoist Accessories	A-10428R	Ground dolly	Plataforma Rodante; Caruaje de Acero

* Parent part number of kit

Wind Access Rental Equipment Guide

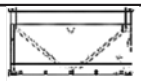
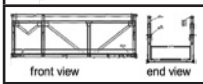
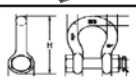
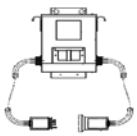
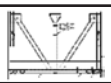
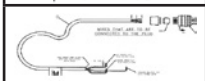
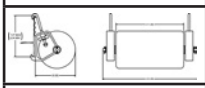
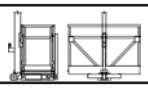
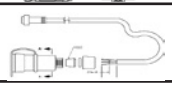
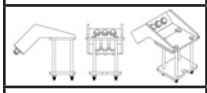
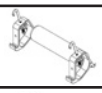
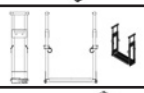
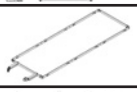
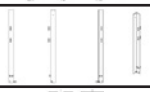
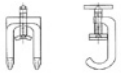
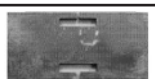
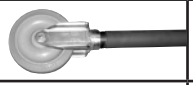
Image	Category	Part Number	Description English	Description Spanish
	Wind Access	008810-2R	Walk thru stirrup	Estribo andador
	Wind Access	008811-1R	End gate	Ensamblaje de compuerta de extremo
	Wind Access	008812-1R	Corner adaptor	Adaptador de esquina
	Wind Access	233740R	5/16 in. fist grip	Grapa/pinza de cables de acero
	Wind Access	3660-100R	Power cord - ft (drop + 50 ft)	Extención; yugo electrico
	Wind Access	3660-250R	Power cord - ft (drop + 50 ft)	Extención; yugo electrico
	Wind Access	4968R	5 ft mod section	Plataforma desección de 5 pies
	Wind Access	4969R	10 ft mod section	Plataforma de sección de 5 pies
	Wind Access	4970R	Connector	Conector de plataformas
	Wind Access	557026R	5/8 in. shackle	Grillete; 5/8 in.
	Wind Access	590012-1R	Transformer 2KVA buck boost	Transformador; 2 KVA; aumento de potencia
no image available	Wind Access	700480-1R	3 ft horizontal lifeline kit	Sistema de linea de vida horizontal de 3 pies
	Wind Access	700755-1R	3 ft mod section	Plataforma de sección de 3 pies
	Wind Access	700786-10R	Remote control	Control remoto
	Wind Access	700939-300R	5/16 wire rope - ft	Cable de alambre IWRC; centrode alambre de acero
	Wind Access	701120-2R	Fixed face roller	Rodillo de fachada de pinza; plataforma modular
no image available	Wind Access	701142-1R	5 ft horizontal lifeline kit	Sistema de linea de vida horizontal de 5 pies
no image available	Wind Access	701143-1R	10 ft horizontal lifeline kit	Sistemo de linea de vida horizontal de 10 pies
	Wind Access	701184-1R	Single line kit	Sistema deconvertir de 3 ó 5 pies en una guindola con un motor
	Wind Access	701602-1R	Remote adapter SC1000	Control remoto de SC1000

Image	Category	Part Number	Description English	Description Spanish
	Wind Access	705413-1R	Kick stand assy	Pata de apoyo
	Wind Access	705464-1R	Storage box	Caja de almacenamiento para herramientas
	Wind Access	705465-1R	Anchor safety line assy.	Ensamblaje de la línea anclaje de seguridad
	Wind Access	705565-1R	Top rail bumper plate includes lifeline/carabineers	Plato de parachoques para el riele alto; incluyen línea de vida / carabineros
	Wind Access	705575-1R	Inlet roller assy for walk thru	Ensamblaje del entrante de rollo para estribo andador
	Wind Access	705598-1R	Hoist lanyard	Acollador de montecarga
no image available	Wind Access	705997-1R	Checklist for swings on wind plants	Lista de verificación para el uso de parques eólicos guindolas en los
	Wind Access	706067-1R	Fixed face roller small diameter	Rollo fijado para superficio; diámetro pequeño
	Wind Access	706108-1R	Subframe mount assy; BAP	Ensamblaje del soporte del subchasis; Plataforma de acceso a la pala del rotor (PAPR)
	Wind Access	706131-1R	10 in. mod section	Plataforma modular de 10 pulgadas
	Wind Access	706536-1R	Subframe kit; BAP 360	Equipo de subchasis; PAPR 360
	Wind Access	706803-1R	Winch assy; BAP 360	Ensamblaje de cabrestante manual; PAPR 360
	Wind Access	706804-1R	Anchor assy; winch; BAP 3	Esamblaje de anclaje;cabrestante; PAPR 360
	Wind Access	8-0406R	SC1000 adapter 20 degree	Adaptador de 20°
	Wind Access	9016R	SC1500	Montacarga electrica modelo SC1500
	Wind Access	SA-1045R	Rail clamp	Grapa de riel; de rodillo
	Wind Access	SA-10843R	50 lb. counterweight	Contrapesas
	Wind Access	SA-1090R	48 in. adj. roller (sold as a pair)	Rodillo de fachada; 48 in.
	Wind Access	SA-3660-1R	10/3 220V yoke	Yugo electrico; 220V
	Wind Access	SA-3660-R	220V, pigtail	Conexión de panel electrico

* Parent part number of kit

Appendix

Glossary of Powered Access & Safety Terms

Accessories: those components which, when added to scaffolding or shoring, enhance their utility or usefulness

Accessway: a system which provides access of personnel to and from scaffold platforms

Adjustable suspension scaffold: a suspension scaffold equipped with a hoist(s) that can be operated by an employee(s) on the scaffold

Allowable load: see **Load, Allowable**

Alternating current (AC): a current which reverses in regularly recurring intervals of time and which has alternative positive and negative values, and occurring a specified number of times per second **(See Frequency)**

American National Standards Institute (ANSI): an organization which develops standard safety specifications and procedures for a wide range of industrial equipment, including ladders and scaffold. Many OSHA regulations are based on these standards. Also known as ANSI

Ampere (Amp): the unit of electric current flow. One ampere will flow when one volt is applied across a resistance of one ohm.

Anchor: a device used to secure any item of scaffold to a rigid point

Anchorage: a secure means of attachment to which the personal fall arrest system is connected

Anchored track: galvanized steel I-beams anchored to the building structure in parallel to enable a roof machine to traverse horizontally along the rooftop

Anemometer: an instrument for measuring wind velocity

Angulated roping: a method of stage suspension in which the upper wire rope sheaves or suspension points are closer to the plane of the building face than the corresponding attachment points on the stage, thus causing the platform to press against the face of the building during its vertical travel

ANSI: see **American National Standards Institute**

Approved: accepted by the authority having jurisdiction

Arresting force: the force, generated by arresting the test weight, that is transmitted through the fall arrest system components to the anchorage

Ascending: a suspended scaffold moving upward, or climbing

Authorized person: a person approved or assigned by the employer to perform a specific type of duty or to be at a specific location on the jobsite

Base: the relevant points at which a structure makes contact with its support

Base plate: a device used to distribute leg or post load over a larger area

Beam: a narrow horizontal structural load-bearing member

Beam clamp (scaffold): a device used to fasten a scaffold member to a beam flange

Beam clamp (shoring/suspended): a device used to fasten two I-beam members at their flanges when one I-beam is resting across the other I-beam flange

Birdcage (suspended scaffolds): a kink pulled through or displacement of outer wire rope strands forced into compression forming a cage

Boatswain's chair: see **Bosun's chair**

Boatswain's stand: see **Bosun's stand**

Body belt (safety belt): a strap with means both for securing it about the waist and for attaching it to a lanyard, lifeline or deceleration device; not acceptable as a fall arrest device

Body harness: a design of straps which may be secured about the employee in a manner to distribute the fall arrest forces over at least the thighs, pelvis, waist, chest and shoulders, with means for attaching it to other components of a personal fall arrest system

Bosun's chair: a suspended seat designed to accommodate one worker in a sitting position

Bosun's stand: a suspended stand designed to accommodate one worker in a standing position

Bowline: a knot used for rigging bosun's chairs, tying off to supports, making a loop for other lines to run through

Bowline on a bight: a variation of the bowline knot, tied in a bight of a rope; it gives two non-slipping loops

Brace: a rigid connection that holds one scaffold member in a fixed position with respect to another member, or to a building or structure

Brake, primary: a brake used to stop a hoist and its load under normal operating conditions

Brake, secondary: a brake designed to prevent the descent of the suspended or supported equipment in the event of an overspeed condition

Breech: the opening between the sheave and the inside of a block

Breech reeving: in suspended access describes the process of placing a suspension wire rope into a device using other than the bitter end to insert the rope into the device. Generally saves time.

Buckle: any device for holding the body belt or body harness closed around the worker's body

Building face roller: a suspended scaffold platform guide roller designed to contact the outer face or wall structure of a building

Building maintenance: operations such as window cleaning, caulking, metal polishing, reglazing and general maintenance on building surfaces

Cable: a conductor or group of conductors enclosed in a weatherproof sheath, that may be used to supply electrical power and/or control current for equipment or to provide voice communication circuits

Cable restraint: flexible wire mesh gripping device designed so that the more you pull, the more it grips; used with swing stages to support the weight of the cable and to relieve stress upon the electrical wiring devices

Cage: see **Scaffold, Single-point adjustable suspension**

Cantilever: the portion of a structural member which projects beyond its support

Capacitance: the property of a circuit or body that permits it to store an electrical charge equal to the accumulated charge divided by the voltage. Capacitance is expressed in farads.

Carabiner: a connector component generally comprised of a trapezoidal or oval shaped body with a normally closed gate or similar arrangement which may be opened to permit the body to receive an object and, when released, automatically closes to retain the object

Glossary of Powered Access & Safety Terms
(Continued)

Carriage: a mobile assembly used for the movement and support of a work platform

Caster: a pivoting wheel, containing a wheel lock, a swivel or non-swivel lock or both, which is attached to the base of a scaffold tower for manual movement of the scaffold; a caster does not have to contain a swivel

Certification: a written, signed and dated statement confirming the performance of a requirement

Certified: accepted by design, evaluation or inspection by a registered professional engineer

Circuit: a complete or partial path over which electric current may flow

Circuit breaker: a mechanical switching device capable of making, carrying, and breaking currents under normal conditions. Also making, carrying for a specific time, and automatically breaking currents under specified abnormal circuit conditions, such as those of short circuit. Circuit breakers have an ampere trip rating for normal overload protection and a maximum magnetic ampere interrupting capacity (AIC) for short circuit protection.

Cladding: wind or weather enclosure material used as a means of containment

Clamp, parapet: an adjustable rigging device that clamps over structural parapets of varying widths from which a load is suspended

Combination cables: wire ropes having both steel wires for support of the equipment and shielded copper wires for use as electrical conductors

Commercial power: the term applied to power furnished by an electric power utility

Competent person: as defined in OSHA 1926.450(b) and 1926.32(f) one who is capable of identifying existing and predictable hazards in the surroundings or working conditions that are unsanitary, hazardous or dangerous to employees and who has the authority to take prompt corrective measures to eliminate such hazards

Conductor: a wire, cable, or bus bar designed for the passage of electrical current

Configuration: all shapes in which a scaffold can be placed within its intended limits

Connector: a device which is used to couple (connect) parts of the personal fall arrest system and positioning device systems together. It may be an independent component of the system.

Contactor: an electro-mechanical device operated by an electric coil; it allows automatic or remote operation to repeatedly establish or interrupt an electrical power circuit.

Contacts: devices for making and breaking electrical circuits, which are a part of all electrical switching devices

Continuous stabilization: the portion of a suspended unit (suspended scaffold) that positively engages the building tie-in guides and provides work platform stabilization for vertical travel of the platform along the full length of the building façade

Continuous stabilization buttons: channel shape attached to each end of the platform that slide over buttons that are placed at every floor

Control: a system governing starting, stopping, direction, acceleration, speed and retardation of moving members

Controlled descent device: a device which allows a worker to descend at a controlled speed

Cornice hook: a hook designed expressly to handle the forces exerted by point-loading the device to secure a suspension cable under a cornice of a building.

Counterweight: weight or weights used to counterbalance a load

Coupler: a device for locking together the tubes of a tube and coupler scaffold

Crossbrace: two diagonal scaffold members joined at their center to form an X

CSA: Canadian Standards Association

Current (I): the amount of electricity flowing in a circuit, measured in amperes

Curved track: fabricated into a radius or cut in degree increments for a segmented curve

Cycle: a given length of time (see **Alternating Current**). In the U.S., most electric current is 60 cycle (60 Hz).

Davit: a member used for support of suspended scaffolds

Dead load (scaffold): the weight of the scaffold structure, including platform and accessories

Dead load (shoring): the weight of forms, stringers, joists, reinforcing rods and the concrete to be placed

Dealer: a person or entity who buys from a manufacturer or distributor and who generally sells, rents and services equipment

Debris chute: an enclosed conveyance to direct the flow of waste material to a collection bin below

Deceleration device: see **Shock absorber**

Deceleration distance: the additional vertical distance a falling employee travels, excluding lifeline elongation and free fall distance, before stopping, from the point at which the deceleration device begins to operate. It is measured as the distance between the location of an employee's body belt or body harness attachment point at the moment of activation (at the onset of fall arrest forces) of the deceleration device during a fall, and the location of that attachment point after the employee comes to a full stop

Descending: a suspended scaffold moving downward

Direct current (DC): an electric current flowing in one direction

Directional controls: all primary controls necessary to raise, lower, rotate, telescope, drive or otherwise initiate the powered functions of the work platform

Distribution panel: a device that provides multiple power outlets from a 208V 3-phase or 240V single-phase power source for operating power tools, work lights, and other electrical equipment

Double bowline: a variation of a bowline knot, tied in a double section of rope; this knot gives two non-slipping loops

Dropline: see **Lifeline**

Duty rating: see **Load**

Dynamic load: see **Load, Dynamic**

Electrical ground: a conducting connection between an electrical device and the earth or another conducting body that serves in place of the earth

Elevation: an established elevation in relation to sea level or another point

Elevation (drafting): a view of a structure in the vertical plane

Emergency (stand-by) power: an independent reserve source of electric power that provides stand-by electric power upon failure or outage of normal power source

End guardrail: a guardrail placed across the end of a scaffold platform or its extensions

Energy absorber: see **Shock absorber**

Equivalent: an alternative design or features that will provide an equal factor of safety

Exposed sides and ends: see **Open sides and ends**

Eye or Eye splice: a loop in a rope around a formed thimble made by fastening the end of the rope back onto itself

Fabricated platform (2-person): fabricated platform unit used to support two workers and limited material; these platforms are usually used with trestles, extension trestles, platforms, step-ladders or they can be used with stirrups as part of a suspended scaffold, provided they are a minimum of 20 in. (508 mm) wide

Fabricated platform (3-person): fabricated platform unit used to support three workers and limited material; these platforms are usually used with stirrups as part of a suspended scaffold or as a scaffold runner board

Façade: face or frontage, typically of a building

Factor of safety: the ratio of ultimate load to the allowable load

Failure: the condition at which a component or assembly can no longer support the load (load refusal)

Fairlead: a guide for wire rope

Fairlead roller: a roller device to allow a minor change in direction of travel of a rope under tension

Fall arrest devices: physical components used to stop a falling worker; these components include but are not limited to nets, body harnesses, lanyards, lifelines, etc.

Fall prevention devices: physical components used to prevent a worker from falling off an elevated surface; these include but are not limited to guardrails, screens, body belts, body harnesses, tethers, etc.

Fist grip: a trade name; see **Twin base clip**

Fixed davit: a davit designed to remain at a fixed location

Flanges: the parallel flat portions that describe the cross-sectional shape of structural members such as I-beams, channels or T-beams

Float scaffold: see **Scaffold, Float**

Four point scaffold: see **Scaffold, Mason's adjustable**

Free fall: the act of falling before a personal fall arrest system begins to apply force to arrest the fall

Free fall distance: the vertical displacement of the fall arrest attachment point on the employee's body belt or body harness between onset of the fall and just before the system begins to apply force to arrest the fall; this distance excludes deceleration distance and lifeline/lanyard elongation, but includes any deceleration device slide distance or self-retracting lifeline/lanyard extension before they operate and fall arrest forces occur.

Freely laid track: galvanized steel I-beams resting on the rooftop and separated from the roof membrane by layers of protective support material and not anchored to the building structure

Frequency: the number of complete cycles of an alternating voltage or current per unit of time, usually expressed in cycles per second or Hertz (Hz)

Full load current (Amps): the greatest current that a motor or other device is designed to carry under specific conditions: when rated voltage is applied at rated frequency with rated horsepower. Any additional current is an overload.

Fuse: an over-current protective device that consists of a conductor that melts and breaks when current exceeds rated value beyond a predetermined time

Generator: a machine that converts mechanical energy into electrical energy/power

Generator receptacle: a contact device installed for the connection of a plug and flexible cord to supply emergency power from a portable generator or other alternate source of power. Receptacles are rated in voltage, amps, number of wires, and by enclosure type.

Grade: the ground, floor, sidewalk, roof or any other approximately level solid surface of sufficient area and having sufficient structural strength to be considered as a safe place to work

Ground: a connection, either intentional or accidental, between an electric circuit and the earth or some conducting body serving in place of the earth

G.F.I. (Ground Fault Interrupter): a device which automatically disconnects electrical current in the event of a short in the circuit

Ground fault circuit interrupter (GFCI): a receptacle with a built in circuit that will detect leakage current to ground on the load side of the device. When the GFCI detects leakage current to ground, it will interrupt power to the load side of the device, preventing a hazardous ground fault condition. GFCI receptacles must conform to UL Standard 943 Class A requirements, and their use is required by the National Electric Code NFPA-70 in a variety of indoor and outdoor locations.

Ground rigged davit: a davit which cannot be used to raise a suspended working platform above the building face being serviced

Ground rigging: a method of assembling a suspended platform while it is positioned at ground level or on another safe horizontal surface

Grounded neutral: the common neutral conductor of an electrical system, which is intentionally connected to ground to provide a current carrying path for the line to neutral load devices

Grounding conductor: the conductor that is used to establish a ground and that connects equipment, a device, a wiring system, or another conductor (usually the neutral conductor) with the grounding electrode

Guardrail: horizontal members of a guardrail system

Guardrail post: the vertical support used in a guardrail system

Guardrail system: members erected in a vertical plane to restrict users from falling from a work platform; may consist of posts, toprails and midrails

Guide button: a building face anchor designed to engage a guide track mounted on a platform

Guide roller: a rotating cylindrical member, operating separately or as part of a guide assembly to provide continuous engagement between the suspended or supported equipment and the building guides or guideways

H-beam: steel beam with wider flanges than an I-beam

Hairpin: a reusable formed wire loop used to keep a rivet or pin in place

Hertz (Hz): a unit of frequency equal to one cycle per second

Glossary of Powered Access & Safety Terms
(Continued)

Hoist: a mechanical device to raise and lower a suspended scaffold

Hoist arm: a vertical upright on which a rope and pulley can be suspended for hoisting light material

Hoist rated load: the hoist manufacturer's maximum allowable operating load

Hoist standard: see **Hoist arm**

Hole: a gap or void 2 in. (51 mm) or more in its least dimension, in a floor, roof or other walking/working surface

Hook: a j-shaped piece of metal on a block, to which a load is attached

Horsepower (HP): the amount of energy required to lift 33,000 lb, one foot, in one minute. The electrical equivalent of one horsepower is 745.6 watts.

I-beam clamp: a device used to secure scaffold rigging to an overhead steel beam

I-beam roller: a device used to secure scaffold rigging to an overhead steel beam to allow horizontal movement of a suspended scaffold

Impedance: a characteristic of an electric circuit that determines its hindrance to the flow of electricity. The higher the impedance, the lower the current. The unit of measure is the same as resistance (ohms).

Inductance: the property of an electric circuit that causes it to store energy in the form of a magnetic field and because of which a varying current in a circuit induces an electromotive force (voltage) in that circuit or a neighboring circuit

Insert: a threaded connector embedded into masonry, concrete or rock to which an anchor device can be connected

Installation: a system of scaffold placed in position for use

Interlock: a device designed to ensure that operations or motions occur in proper sequence

Intermittent stabilization: a method of platform stabilization in which the angulated suspension wire rope(s) is secured to regularly spaced building anchors

Intermittent tie-ins: a means of stabilization whereby a scaffold's suspension ropes are secured to permanently installed building anchors and which are located in vertical rows in close proximity to the suspension ropes

Joists: horizontal structural members which directly support sheathing

Kilovolt-Amperes (kVA): a rating of apparent power before being used, such as the rating of a transformer

Kilowatt (kW): a unit of measure of electrical power, equal to 1000 watts. Used where larger units of electrical power are measured.

Ladder stand: a mobile, fixed-size, self-supporting ladder consisting of a wide flat tread ladder in the form of stairs

Landing: a platform at the end of a flight of stairs

Lanyard: a component consisting of a flexible line of rope, wire rope or strap which generally has a connector at each end for connecting the body support to a fall arrester, energy absorber, anchorage connector or anchorage

Lifeline: a flexible line for connection to an anchorage at one end to hang vertically (vertical lifeline), or for connection to anchorage at both ends to stretch horizontally (horizontal lifeline), and which serves as a means for connecting other components of a personal fall arrest system to the anchorage

Limit switch: an electrical sensing device which stops movement of a platform through an electrical disengagement

Live load: workers and materials on the platform

Load

- **Allowable:** (Also called **Rated Load**) the load limit at which the item is to be used; determined by dividing the ultimate load by an appropriate factor of safety
- **Dynamic:** an additional load imposed on a scaffold structure, caused by movement of the scaffold, wind movement of loads on the platform, brake engagement during movement, etc.
- **Maximum intended:** see **Maximum intended load**
- **Total (suspended)**: the sum of all loads supported by the wire rope
- **Ultimate load:** the load at which failure occurs
- **Working load:** see **Load, Allowable**

Lower levels: areas below the level where the employee is located and to which an employee can fall; such areas include but are not limited to ground levels, floors, roofs, ramps, runways, excavations, pits, tanks, materials, water and equipment

Manual: a book or pamphlet containing written instructions on how to operate and/or maintain a product

Manufacturer: a person or entity who makes, builds or produces a product

Mason's adjustable multiple-point suspension scaffold: see **Scaffold, Mason's adjustable**

Maximum intended load: the total load of all persons, equipment, tools, materials, transmitted loads, and other loads reasonably anticipated to be applied to a scaffold or scaffold component at any one time

Mechanical equipment: all motor or human propelled wheeled equipment used for roofing work, except wheelbarrows and mopcarts

Microns: measurement used to define particulates in the air stream (one micron = one millionth of a meter, about one eighth the thickness one human hair)

Midrail: a horizontal member approximately midway between the toprail and platform of a guardrail system

Mobile davit: a davit designed to be used in association with a roof car

Multi-layered drum hoist: suspension wire ropes that lay on a drum hoist one on top of another

Multi-level suspended scaffold: see **Scaffold, Multi-level suspended**

Multiple-point suspended scaffold: see **Scaffold, Multi-point suspended**

Multiple wrap drum hoist: a type of hoisting machine that accumulates the suspension wire rope in more than one successive layer on the surface of the drum of the hoist

NEC: the National Electrical Code, which is the standard of the National Board of Fire Underwriters for electric wiring and apparatus, as recommended by the National Fire Protection Association

NEMA: National Electrical Manufacturers Association, a non-profit trade association supported by the manufacturers of electrical apparatus and supplies. NEMA promulgates standards to facilitate understanding between manufacturers and users of electrical products.

Neutral: the point common to all phases of a polyphase circuit, conductor to that point, or return conductor in a single phase circuit. The neutral in most systems is grounded at or near point of service entrance only and becomes the grounded neutral.

Occupational Safety and Health Act: a United States Federal Law that regulates safe work practices affecting employees; also known as **OSHA**. See OSHA.gov for more information

Ohm: unit of electrical resistance. One volt will cause a current of one ampere to flow through a resistance of one ohm.

Ohm's Law: the rate of the flow of the current is equal to the electromotive force divided by the resistance. The three basic Ohm's law formulas are:

Amperes = Volts ÷ Ohms
Ohms = Volts ÷ Amperes
Volts = Amperes x Ohms

Open sides and ends: the edges of a scaffold platform that exceed the maximum allowable horizontal distance away from a sturdy, continuous vertical surface (such as a building wall) or a sturdy, continuous surface (such as a floor); this is normally a distance of 14 to 18 in. (356 to 457 mm), but may be greater or lesser depending upon the type of work to be performed on the platform and the particular safety standard under which the work is being performed

Opening: a gap or void 30 inches (760 mm) or more high and 18 inches (480 mm) or more wide, in a wall or partition through which employees can fall to a lower level

Operating control: a mechanism regulating or guiding the operation of equipment that ensures a specific operating mode

Operating device: a device actuated manually to activate a control

OSHA: see **Occupational Safety & Health Act**

Outreach: the distance between the fulcrum point and the suspension point. Also referred to as "reach" or "thrustout"

Outrigger (suspension): a structural member extending out from a building or structure to support a hanging scaffold

Outrigger beam (thrustout): the structural member of a suspension scaffold or outrigger scaffold which provides support for the scaffold by extending the scaffold point of attachment to a point out and away from the structure or building

Outrigger scaffold: a supported scaffold consisting of a platform resting on outrigger beams (thrustouts) projecting beyond the wall or face of the building or structure, the inboard ends of which are secured inside the building or structure

Overload device: an electro-mechanical device in a drum or traction hoist that senses an overloading condition and arrests upward travel until the overloading is resolved

Overload protection: See **Thermal overload protection.**

Owner: a person or entity who has possession of a product by virtue of proof of purchase

Parallel circuit: an electrical circuit that has more than one path though which electrons may flow

Parapet: that part of a wall that extends above the roof level which may or may not be structural

Parapet clamp: see **Clamp, parapet**

Particulates: any solid material, such as dirt, rust, weld fines, pollen, etc., that is in the air stream

Pedestal: support for I-Beam track fabricated from steel or concrete

Personal fall arrest system (PFAS): an assembly of components, subsystems and anchorage used to arrest a person in a fall from a working height

Pin and sleeve: a receptacle with cylindrical sleeve-type contacts

Platform: an elevated work surface composed of one or more platform units

Modular: any platform assembled from standard components to form various lengths or configurations

Pick: a fabricated platform with a unique shape, wide in the center and narrow at the ends

Powered: suspended or supported manned equipment used to provide access to the face of the building for the purpose of construction, maintenance or window cleaning, and which is raised or lowered by powered hoist equipment

Platform height: the vertical distance measured from the ground floor to the platform

Platform rated load: the combined weight of workers, tools, equipment and other material which is permitted to be carried by the working platform at the installation, as stated on the load rating plate

Platform stabilization: means of stabilization of the platform to the façade (continuous or intermittent) to prevent the platform from being blown away from the façade during windy conditions

Platform unit: a general term for individual components (planks, scaffold decks or fabricated platforms) that comprise the platform of a scaffold; platform units can either stand alone or be used in conjunction with one another to form a platform

Plumb: vertical or the act of making vertical

Polypropylene: a type of synthetic material

Positioning device system: a body belt or body harness system rigged to allow an employee to be supported on an elevated vertical surface, such as a wall, and work with both hands free while leaning

Power operated hoist: a hoist which is powered by other than human energy

Primary brake: see **Brake, primary**

Professional engineer: a person registered or licensed to practice engineering under state or provincial jurisdiction

PSI: pounds per square inch (unit for pressure of compressed air)

Qualified person: one who, by possession of a recognized degree, certificate or professional standing, or who by extensive knowledge, training and experience, has successfully demonstrated the ability to solve or resolve problems related to the subject matter, the work or the project

Rated load: the manufacturer's recommended maximum load

Rated working load: the combined static weight of men, materials and suspended or supported equipment

Reactance: the component of impedance that does not dissipate energy. Inductive reactance stores magnetic energy and hinders the flow of alternating current. Capacitive reactance stores electric energy.

Relay: an electric device that is designed to interpret input conditions in a prescribed manner and, after specified conditions are met, to respond and cause contact operation or similar abrupt changes in associated electric control circuits

Resistance (R): the non-reactive opposition that a device or material offers to the flow of direct or alternating current. Usually measured in ohms. The larger the resistance the lower the current for a given source (driving) voltage.

Glossary of Powered Access & Safety Terms
(Continued)

Roll-out (fall arrest device): the process by which a snaphook or carabiner unintentionally disengages from another connector or object to which it is coupled

Roller bumper: see **Building face roller**

Rolling tower: a scaffold supported by casters

Roof: the exterior surface on the top of a building; this does not include floors or formwork which, because a building has not been completed, temporarily becomes the top surface of a building

Roof car: a structure for the suspension of a working platform, providing for its horizontal movement to working positions

Roof hook: the anchoring device used to support a suspension system. A roof hook is not acceptable to use as a cornice hook.

Roof mounted hoist: hoist units are mounted on a roof carriage that is mounted on the roof

Roof powered platform: a working platform where the hoist(s) is used to raise or lower the platform located on the roof

Roof rigged davit: a davit used to raise the suspended working platform above the building face being serviced; this type of davit can also be used to raise a suspended working platform which has been ground-rigged

Roofing work: the hoisting, storage, application and removal of roofing materials and equipment, including related insulation, sheet metal and vapor barrier work, but not including the construction of the roof deck

Rope: the equipment used to suspend a component of an equipment installation (i.e., wire rope)

Rope grab: a deceleration device which travels on a lifeline and automatically, by friction, engages the lifeline and locks so as to arrest the fall of an employee; a rope grab usually employs the principle of inertial locking, cam/level locking or both

Safety factor: the ratio of the nominal strength to the nominal design load

Safety harness: a system of straps worn by a user to arrest a fall when used as part of a fall arrest system

Scaffold: a temporary elevated or suspended work unit and its supporting structure used for supporting a worker(s), materials or both

> **Adjustable:** a scaffold structure with a manually elevating carriage that supports work and material

Area: an assemblage of tube and couple or system scaffold components to form a grid

Bracket form: see **Scaffold, Form**

Bricklayer's square: a scaffold composed of framed wood squares which support a platform

Buggy: see **Scaffold, Rail**

Built-up: see **Scaffold, Supported**

Carpenter's bracket: a scaffold consisting of a platform supported by brackets attached to a vertical surface

Catenary: a platform supported by two essentially horizontal and parallel wire ropes which are secured to structural members

Double pole: a scaffold supported from the base by a double row of posts; this scaffold is independent of support from the walls and is constructed of posts, runners, bearers and horizontal platforms

Fabricated tubular frame: a system of tubular metal frames (panels) field erected with bracing members

Float: a suspended large area platform in any configuration where multiple hoists are used to lift the platform

Form: a wood or metal bracket attached to a wall form upon which scaffold planks rest, for the purpose of providing an elevated working platform for those engaged in rebar and concrete placement

Free standing: a scaffold which is not attached to any other structure but is stable in itself or, if necessary, stabilized by outriggers and/or anchors

Hallway: a narrow fabricated mobile scaffold, capable of incremental adjustments

Horse: a scaffold for light or medium duty use, composed of horses supporting a work platform

Independent pole: see **Scaffold, Double pole**

Independent tied: a run scaffold consisting of two lines of posts, one line supporting the inside and tied to the structure at predetermined intervals

Interior hung: a suspension scaffold consisting of a platform suspended from the ceiling or roof structure by fixed length supports

Ladder jack: a light-duty scaffold consisting of a platform supported by brackets attached to single or extension ladders

Manually propelled mobile: a scaffold assembly supported by casters and moved manually

Mason's adjustable: a scaffold having a continuous platform supported by bearers suspended by more than two wire ropes from overhead supports, so arranged and operated as to permit the raising or lowering of the platform to desired working positions

Modular: see **Scaffold, System**

Multi-level suspended: a two-point or multi-point adjustable suspension scaffold with a series of platforms at various levels supported by common stirrups

Multiple-point suspended: a suspension scaffold consisting of a platform(s) suspended by more than two ropes from overhead supports and equipped with means to permit the raising and lowering of the platform to desired work levels; this definition does not include two-point adjustable suspension scaffolds which are bridged one to another

Needle beam: a suspension scaffold consisting of a platform supported by bearers and suspended from overhead supports by fixed length ropes

Outrigger: a scaffold consisting of a work unit supported by outriggers or thrust-outs projecting beyond the wall or face of the building or structure; the inboard ends of the outriggers are secured inside of the building or structure

Parapet: see **Scaffold, Rail**

Prefabricated mobile: a scaffold system that is manufactured and shipped with all necessary components for the sole purpose of being used as a mobile scaffold

Pump jack: a scaffold system which climbs a braced pole using a mechanical, clamping device activated by the pumping of a foot lever

Rail: a combination of scaffold systems and components used to suspend a work platform under structures, primarily bridges; the scaffold attaches in various configurations to the bridge's guardrails, facial girders, beams or parapets; it includes a system of rollers which allow the entire work platform to be moved along under the lower portion of the bridge

Ship scaffold: see **Scaffold, Float**

Single-point adjustable suspension: a scaffold consisting of a platform suspended by one rope from an overhead support, equipped with a means to permit the raising and lowering of the platform to desired work levels

Single pole: a scaffold which has one line of standards to support the outside edge of the deck and utilizes the wall being built or the structure to support the inside ends of the putlogs (transoms)

Stone setters adjustable multiple-point suspension: a platform run supported by putlogs and hoists suspended from at least four points to permit raising and lowering to a desired working position

Supported: one or more platforms supported by outrigger beams, brackets, poles, legs, uprights, posts, frames or similar rigid support

Suspended:

- **Manual:** a manually operated scaffold suspended by rope from an overhead supporting system so arranged and operated as to permit raising or lowering to desired working positions
- **Powered:** a power-operated scaffold suspended by wire rope from an overhead supporting system so arranged and operated as to permit raising and lowering to desired working positions

Swing: a suspension scaffold consisting of platforms supported by hangers (stirrups) suspended by two ropes from overhead supports and equipped with means to permit the raising and lowering of the platform to desired work levels

System: a scaffold consisting of posts with uniformly spaced fixed connection points that accept runners, bearers and diagonals

Temporary: a suspended scaffold used to service structures on a temporary basis for construction, alteration, demolition and maintenance

Tower: a scaffold structure with a height greater than its largest base dimension

Tube and coupler: a scaffold consisting of individual pieces of tubing or pipe erected with special coupling devices which join posts, braces and runners to form an integral load-carrying structure

Two-point suspension (swing): a suspension scaffold consisting of a platform supported by hangers (stirrups) suspended by two ropes from overhead supports and equipped with means to permit the raising and lowering of the platform to desired work levels

Window jack: a scaffold, the platform of which is supported by a bracket that projects through a window opening

Scaffold hoist: a device intended to raise and lower a suspended scaffold

Scaffold layout: a designed drawing prepared prior to erection showing proper arrangement of scaffold equipment

Scaffold run: a continuous series of scaffold bays in a single direction

SCFM: standard cubic feet per minute

Screen: a wire or plastic mesh barrier installed between scaffold guardrails and toeboards to keep tools and materials from falling off the scaffold platform; required whenever there are people working or passing under scaffolds

Screwjack: a load carrying device that allows adjustments in the height of a scaffold or shoring system

Screwjack caster: a screwjack with a tube end to accept a caster shaft or baseplate

Secondary brake: a brake that is intended to stop the suspended scaffold under emergency conditions only

Self powered platform: a working platform where the hoist(s) is used to raise or lower the platform

Shackle: a U-shaped structural steel attachment device

Sheave: a pulley wheel inside a hoist or block and tackle which is used to gain traction or change the direction of the rope

Shock (shoring): the impact of material such as fresh concrete as it is released or dumped on formwork during placement

Shock absorber: a component of a system that allows dissipation of energy by extending the deceleration distance

Single fixed boom: box type steel section with maximum standard fixed length of 72 ft (22 m); longer fixed reaches are available

Single-phase circuit: a circuit that differs in phase by 180°. Single-phase circuits have two conductors, one of which may be a neutral or three conductors, and one of which is neutral.

Single-point adjustable suspension scaffold: see **Scaffold, Single-point adjustable suspension**

Sling: a length of fiber or wire rope spliced together at the ends to form a circle; used to wrap around loads for the purpose of hoisting

Snaphook: a self-closing device with a keeper, latch or other similar arrangement that will remain closed until manually opened; this includes self-closing, single action, double action and double locking snaphooks

Soffit: the underside of a subordinate part or member of a building, such as a beam, stairway, arch, eave, etc.

Span: the horizontal distance between posts, columns or upright support members

Special purpose fabricated stage: a platform unit that represents either a modification or a combination of design or construction features in one of the general-purpose types of scaffold decks or fabricated platforms

Glossary of Powered Access & Safety Terms
(Continued)

Splice: (a) a method of weaving the strands of ropes together to make a permanent connection; (b) a method of connecting two sections of post together to make a longer post

Stability: a condition of a structure where the sum of all the moment forces (dead and live) that exist to prevent overturning are greater than the moment forces (horizontal and vertical) that cause overturning

Stability factor: a calculated ratio of the existing stabilizing moment to the probable overturning moment

Stage: see **Platform**

Stand-by power: see **Emergency Power**

Starting amps: the maximum current drawn by a motor during the starting period

Step-down transformer: a transformer that provides one or more electrical outlets at reduced voltage and current from the main power source

Stirrup: the device that connects the hoist mechanism to the suspended platform

Stone setters adjustable multi-point suspension scaffold: See **Scaffold, Stone setters adjustable multi-point suspension**

Strain relief anchor: a mechanical device for anchorage of cable to prevent undue strain on the electrical cable-connectors

Supported scaffold: one or more platforms supported by outrigger beams, brackets, poles, legs, uprights, posts, frames or similar rigid support

Surge arrestor: a protective device for limiting surge voltages on equipment by discharging or bypassing surge current; it prevents continued flow of follow current to ground, and is capable of repeating these functions as specified.

Suspended equipment: building maintenance equipment that is suspended and raised or lowered to its working position by means of ropes or combination cables attached to some anchorage above the equipment

Suspended scaffold, manual: see **Scaffold, Suspended, Manual**

Suspended scaffold, powered: see **Scaffold, Suspended, Powered**

Suspended scaffold, swing: see **Scaffold, Suspended, Swing**

Suspended scaffold, temporary: see **Scaffold, Suspended, Temporary**

Swaged fitting: a metal sleeve that is cold-formed onto wire rope

Swing stage: a device for making, breaking, or changing connections in a circuit

System scaffold: a scaffold consisting of posts with fixed connection points that accept runners, bearers and diagonals that can be interconnected at predetermined levels

Tag line: a second rope attached to a load being hoisted or lowered to keep it from swinging out of control and striking workers, scaffold members or other objects

Tail line: the non-supporting end of a suspension wire rope

Terminal block: an insulating base equipped with terminals for connecting wires

Thermal overload protection: the effect of a device operative on excessive current, but not necessarily on short circuit, to cause and maintain the interruption of current flow to the device being governed

Three-phase circuit: a combination of circuits energized by alternating electromotive sources that differ in phase by one third of a cycle, that is, 120°. A three-phase circuit may be three wire or four wire with the fourth wire being connected to the neutral point of the circuit that may be grounded.

Thrustout: see **Outrigger (suspension)**

Tieback: an attachment from a structural member to a supporting device

Tie-in-device: portion of a suspended unit that positively engages the building tie-in-guides

Tie-in-guide: portion of a building that provides continuous positive engagement between the building and a suspended unit during its vertical travel on the face of the building

Toeboard: a barrier secured along the sides and the ends of a platform unit to guard against the falling of material, tools and other loose objects

Toprail: the uppermost horizontal rail of a guardrail system

Total load (suspended): See **Load, Total (suspended)**

Track: standard I-beam shapes anchored or freely laid on the roof

Traction drum or sheave hoist: a device that does not accumulate the suspension rope but is designed to climb the rope by the application of a friction force between the rope and the drum or sheave

Trained personnel: one who has received instruction and has demonstrated the ability to perform a certain task or operation

Transformer: a static electric device consisting of a single winding, or two or more coupled windings, used to transfer power by electromagnetic induction between circuits at the same frequency, usually with changed values of voltage and current

Transportable outriggers: outriggers designed to be moved from one work location to another

Traversing: moving the roof carriage horizontally on the roof with electrically powered motors

Trolley line: a horizontal lifeline

Trolley system: an overhead track-mounted unit which suspends a hoist for workers, material or both

Turntable: horizontal pivot point between mast and roof carriage

Twin base clip: a device used to fasten the end of a wire rope which has been looped over a thimble to the main rope support

Two-point suspended powered scaffold: see **Scaffold, Two-point suspension**

U-bolt: a U-shaped metal rod, threaded at its ends

UL: the common abbreviation for Underwriters Laboratories, Inc.

Underwriters Laboratories, Inc.: an organization that tests the safety aspect of a wide variety of equipment used in industry and in the home, in accordance with a set of engineering and design standards

User: an individual having access to or control over the equipment

Verified: accepted by design, evaluation, or inspection by a registered professional engineer

Volt: a unit of measure of electric potential and electromotive force, equal to the difference of electric potential between 2 points on a conducting wire carrying a constant current of one ampere when the power dissipated between the points is one watt

Voltage: electromotive force, or difference in electric potential, expressed in volts

Walkway: a portion of a scaffold platform used only for access and not as a work level

Watt: a unit of measure of electrical power, equal to the power used when one volt causes one ampere to flow in a circuit

Weatherproof: equipment so constructed or protected that exposure to the weather will not interfere with its operation

Web: a member which separates flanges on a beam

Whipcheck: safety cable used to restrain air hoses if an end breaks

Winch: a stationary motor-driven or hand-powered machine used for hoisting or hauling, having a drum around which is wound a rope or chain attached to the load being moved

Wind speed: the speed, measured in miles per hour or meters per second, of the wind at elevation

Winding drum hoist: a type of hoisting machine that accumulates the suspension wire rope on the hoisting drum

Work basket (cage): see **Scaffold, Single-point adjustable suspension**

Working platform: suspended or supported equipment intended to provide access to the face of a building and manned by persons engaged in building maintenance

Wrap: one complete turn of the suspension wire rope around the surface of a hoist drum

Conversion Tables

US Customary to Metric Conversions

When You Know	Multiply By	To Find
inches	25.4	millimeters
	2.54	centimeters
feet	30.48	centimeters
	0.3048	meters
yards	0.91	meters
ounces	28.35	grams
pounds	0.45	kilograms
short tons (2,000 lb)	0.91	metric tons

Metric to US Customary Conversions

When You Know	Multiply By	To Find
millimeters	0.04	inches
centimeters	0.39	inches
	0.033	feet
meters	3.28	feet
	1.09	yards
kilometers	0.62	miles
grams	0.035	ounces
kilograms	2.21	pounds
metric ton (1,000 kg)	1.10	short ton

Notes

Alphabetical Product Index

Part Number	Product Description	Page Number
8-0406	20° Hoist Adapter	38, 85
704241-1	5x5 Max Reach Assembly	98, 111
704241-2	5x5 Max Reach Assembly	98, 111
8-0278	90° Hoist Adapter	38, 85, 174
1258-1	Adjustable Outrigger Stand	104
705771-1	Adjustable Tank Edge Clamp	124
2-731	A-Frame Stirrup Assembly	84
702049-1	Air Extension; 36 in.; Whip	45
700903-1	Aluminm Work Cage; w/o Caster	56
BD-00018	Anchor; 1 in.; 10K; Fall Arrest	160
BD-00019	Anchor; 1 in.; 2K; Material	126
BD-00009	Anchor; 3/4 in.; 5K; Fall Arrest	160
BD-00008	Anchor; Beam; Horizontal; Lightweight; 4-12	159
BD-00017	Anchor; Eye Bolt; Temporary	161
P-00236	Anchor; Roof; Nail Down	170
P-00601	Anchor; Roof; Screw Down	170
P-00247-201	Angular; Stirrup; Fold-Up	61
701301-1	Arc Guard Assembly; SC30/40	38, 135
701301-2	Arc Guard Assembly; Zmac/1000®	38, 133, 135
SA-1083-1000	Arc Guard Kit; 1000 ft; Drum	67, 134
SA-1083	Arc Guard Kit; 500 ft; Drum	67, 134
SA-1083-26	Arc Guard Kit; Complete; ST-26	67, 134
700953-1	Arc Guard; Bottom Assembly; Removable; 1000 ft	135
700947-1	Arc Guard; Bottom Assembly;	
	Removable; 500 ft	134, 135
701305-1	Arc Guard; Bottom Assembly;	
	ST-26 Removable	135
1581	Arc Guard; Mid Assembly	38, 67, 134, 135
4485	Arc Guard; Top Assembly	38, 134, 135
510173	Basket; Brick; 400 lb cap; Beta Max	182
510174	Basket; Equip; 800 lb cap; Beta Max	182
P-00227	Beam Clamp; 4.5-12 in.; Vertical	159
702096-1	Beam Tie-Down System	105
9-73 or 710272-1	Bosun Chair	62
702554-1	Bottom Flange Truss Outrigger	119
700583-1	Bracket Assembly; Standoff	114
SA-1003-1	Bracket; Flange Adapter	122
6685	Bracket; Outlet Spring	82
SA-1089	Bracket; Parapet Adjustable Standoff	115
510033	Bucket; Dumpster; 24 gal; Beta Max	183
510034	Bucket; Dumpster; 31 gal; Beta Max	183
510032	Bucket; Dumpster; 40 gal; Beta Max	183
SA-1037	Bumper; Adjustable Wall	67, 83
P-00213	Cable Grab; 5/16 in.; Stainless Steel; (K)	158
BD-00021	Cable; 9 ft; Galvanized Swivel Shackle	163
P-00228	Carabiner; Twist Lock; 115.7 mm	161
4986-01	Caster Assembly	85
A-11394	Caster w/ Stem	102
A-11835	Caster w/ Stem; 1200 lb load	102, 126
A-11934	Caster w/ Stem; 750 lb load	126
701135-1	C-Beam Assembly	117
SA-1579	Channel Beam Hook	115
SA-1040	Clamp; I-Beam Assembly; 13.5 in.	123
SA-1039	Clamp; I-Beam Assembly; 8 in.	123
SA-1045	Clamp; Rail	67
701877-1	Corner Support Post	97
700558-12-1	Cornice Hook; 12 in.; w/o Bracket	114
700558-21-1	Cornice Hook; 21 in.; w/o Bracket	114
701878-1	Counterweight Beam Sling	103
510020U	Counterweight Clamp Set	181
510052U	Counterweight Clamp Set	181
BD-00011	Cross Arm Strap; 3 ft; D-Rings; Blk	161
BD-00014	Cross Arm Strap; 4 ft; D-Rings; Blk	161
BD-00006	Cross Arm Strap; 6 ft; D-Rings; Blk	161
93-001	Cross Beam Assembly	82, 85
A-11396	Cross Brace; 12 ft x 3 ft	102
A-11395	Cross Brace; 12 ft x 4 ft	102
510106	Double Rope Kit; Large; Beta Max	181
704258-2	Down Under Assembly	96
707034-1	Drill Bench Assy; Mod Platform	84
702064-1	Electrical Set; Material Hoist	174
702067-1	End Stop Assembly; 5x5	122, 174
702396-1	Extended Parapet Clamp	116
8-0108R	Filter/Lubricator; Rental	247
233740	Fist Grip; 5/16 in.	126
Call for part #	Fixed I-Beam; Beta Max Mounting System	180

Part Number	Product Description	Page Number
701960-2	Fixed Outrigger Gantry Stand	100
700934-1	Flydeck Assembly; 3 ft; Work Cage	66, 68
SA-1050	Flydeck; 2 ft	66, 68
SA-1052	Flydeck; 2 ft Demountable	66, 68
SA-1051	Flydeck; 3 ft	66, 68
SA-1053	Flydeck; 3 ft Demountable	66, 68
P-00130-5	Fold-Up Work Cage; 4 ft External Mount	60
P-00130-4	Fold-Up Work Cage; 6 ft External Mount	60
P-00130-3	Fold-Up Work Cage; 6 ft Internal Mount	60
P-00130-2	Fold-Up Work Cage; 8 ft External Mount	60
P-00130-1	Fold-Up Work Cage; 8 ft Internal Mount	60
510016	Fork; Block; 800 lb cap; 16 blocks; Beta Max	182
510015	Fork; Brick; 400 lb cap; Beta Max	182
510026	Fork; Scaffold Fram; 600 lb cap; Beta Max	182
A-11393	Frame; Outrigger; 5x4	102
61.035-0837	Frame; Side; 0.95 m; Modulo 18	87
61.035-1289	Frame; Side; 1.4 m; Modulo 18	87
61.035-1741	Frame; Side; 1.85 m; Modulo 18	87
701966-1	F-Weldment Assy; 5x5	104
510002	Gemini Plus; 110V; Beta Max	177
510003	Gemini Plus; 220V; Beta Max	177
SA-3065	Ground Dolly; ST-19	67
SA-1072	Ground Dolly; Standard	67
61.036-0837	Guard Rail; 0.95 m; Modulo 18	87
61.036-1289	Guard Rail; 1.4 m; Modulo 18	87
61.036-1741	Guard Rail; 1.85 m; Modulo 18	87
707785-2	Harness; Basic Fit; L/XL; Mating	150
707783-2	Harness; Basic Fit; L/XL; Tongue	150
707785-1	Harness; Basic Fit; S/M; Mating	150
707783-1	Harness; Basic Fit; S/M; Tongue	150
707785-3	Harness; Basic Fit; XXL; Mating	150
707783-3	Harness; Basic Fit; XXL; Tongue	150
701250-1	Harness; Climbing; L/XL	152
701251-1	Harness; Climbing; L/XL; Tongue	152
701248-1	Harness; Climbing; S/M; Front D-Ring	152
701249-1	Harness; Climbing; S/M; Tongue	152
701361-1	Harness; Confined; L/XL; Mating	152
701362-1	Harness; Confined; L/XL; Tongue	152
701359-1	Harness; Confined; S/M; Mating	152
701360-1	Harness; Confined; S/M; Tongue	152
707788-2	Harness; Constructor; L/XL; Mating	152
707787-2	Harness; Constructor; L/XL; Tongue	152
707788-1	Harness; Constructor; S/M; Mating	152
707787-1	Harness; Constructor; S/M; Tongue	152
707788-3	Harness; Constructor; XXL; Mating	152
707787-3	Harness; Constructor; XXL; Tongue	152
707795-2	Harness; Fall Arrest; L/XL; Standard	151
707793-2	Harness; Fall Arrest; L/XL; Tongue	151
701265-1	Harness; Fall Arrest; L/XL; Waist Belt	151
701267-1	Harness; Fall Arrest; L/XL; Waist Belt; Tongue	151
707795-1	Harness; Fall Arrest; S/M; Standard	151
707793-1	Harness; Fall Arrest; S/M; Tongue	151
707795-3	Harness: Fall Arrest: XXL; Mating	151
707793-3	Harness: Fall Arrest: XXL; Mating	151
701246-1	Harness; Loop; L/XL	152
701247-1	Harness; Loop; L/XL; Tongue	152
701244-1	Harness; Loop; S/M	152
701245-1	Harness; Loop; S/M; Tongue	152
701365-1	Harness; Positioning; L/XL; Mating	151
701366-1	Harness; Positioning; L/XL; Tongue	151
701364-1	Harness; Positioning; S/M; Tongue	151
707786-2	Harness; Stretch Constructor; L/XL; Mating	152
707782-2	Harness; Stretch Constructor; L/XL; Tongue	152
707786-1	Harness; Stretch Constructor; S/M; Mating	152
707782-1	Harness; Stretch Constructor; S/M; Tongue	152
707786-3	Harness; Stretch Constructor; XXL; Mating	152
707782-3	Hanress; Stretch Constructor; XXL; Tongue	152
701373-1	Harness; Stretch Fall Arrest; L/XL; Mating	151
701375-1	Harness; Stretch Fall Arrest; L/XL; Tongue	151
701372-1	Harness; Stretch Fall Arrest; S/M; Mating	151
701374-1	Harness; Stretch Fall Arrest; S/M; Tongue	151
700784-1	Hoist Cover; Canvas; Zmac/1000®	38, 135, 171
701018-1R	Hoist Cover; Polypropylene; Zmac/1000®	38, 171
9970	Hoist Cover; SC1000/1500	38, 135, 171
94-001	Hoist Cover; SC30/40	38, 135, 171

Alphabetical Product Index
(continued)

Part Number	Product Description	Page Number
ST-17	Hoist; Air Drum	44
SC30	Hoist; Air Traction	34
ST-17-4-xxx	Hoist; Aluminum Cage; 18 in. Eye Splice	45
ST-17-6-xxx	Hoist; Aluminum Cage; 18 in.	
	Eye Splice; Arc Guard Kit	45
ST-17-3-xxx	Hoist; Aluminum Cage; Thimble	45
ST-17-5-xxx	Hoist; Aluminum Cage; Thimble; Arc Guard Kit	45
ST-19A	Hoist; Demountable Air	48
ST-19E	Hoist; Demountable Electric	49
ST-180	Hoist; Electric; Drum; 220V	54
SC40	Hoist; Electric; Traction	33
ST-26	Hoist; Mini Air	52
9025	Hoist; SC1000 Air	31
9008	Hoist; SC1000; 1 Ph; +OL	28
9006	Hoist; SC1000; 1 Ph; +SR	28
9009	Hoist; SC1000; 1 Ph; +SR+OL	28
9007	Hoist; SC1000; 1 Ph; +SR+OL+TL	28
9045	Hoist; SC1000; 1 Ph; 110V	31
9048	Hoist; SC1000; 1 Ph; 110VAC; +OL	31
9046	Hoist; SC1000; 1 Ph; 110VAC; +SR	31
9049	Hoist; SC1000; 1 Ph; 110VAC; +SR+OL	31
9026	Hoist; SC1000A; 750-1500 lb; +SR	31
9005	Hoist; SC1000E; 1 Ph; 208V	26, 28
9018	Hoist; SC1500; 1 Ph; +OL	29
9016	Hoist; SC1500; 1 Ph; +SR	29
9019	Hoist; SC1500; 1 Ph; +SR+OL	29
9017	Hoist; SC1500; 1 Ph; +SR+OL+TL	29
9035	Hoist; SC1500; 3 Ph	30
9038	Hoist; SC1500; 3 Ph; +OL	30
9036	Hoist; SC1500; 3 Ph; +SR	30
9039	Hoist; SC1500; 3 Ph; +SR+OL	30
9037	Hoist; SC1500; 3 Ph; +SR+OL+TL	30
9015	Hoist; SC1500E; 1 Ph; 208V	26, 29
99115	Hoist; SC40; Single Phase; 1500 lb	33
99135	Hoist; SC40; Three Phase; 1500 lb	33
ST-17-8-xxx	Hoist; SST Cage; 18 in. Eye Splice	45
ST-17-10-xxx	Hoist; SST Cage; 18 in. Eye Splice; Arc Guard Kit	45
ST-17-7-xxx	Hoist; SST Cage; Thimble	45
ST-17-9-xxx	Hoist; SST Cage; Thimble; Arc Guard Kit	45
700783-1	Hoist; Zmac/1000®	35
701127-1	Hoist; Zmac/1000® Air	35
SA-3205	Hook; Rigging; Large	116
SA-1073	Hook; Rigging; Small	116
701881-1	H-Plate Assembly	99
707942-1U	I-Beam Suspension Bracket	181
Call for part #	I-Beam Trolley; Beta Max Mounting System	180
701074-3	Insulated Thimble Assembly; Pin Clip End	133
701074-1	Insulated Thimble Assembly; Seize End	133, 135
701074-2	Insulated Thimble Assembly;	
	Thimble End	38, 133, 135, 171
701108-xxx	Insulated Wire Rope Assembly; Drum Hoists	135
701118-xxx	Insulated Wire Rope Assembly; Traction Hoists	135
4897	Insulator Assembly; Wire Rope	133, 135
4904	Insulator Assembly; Wire Rope Lg	135
BD-00010	Lanyard; 10 ft; Web Retractable; Swivel Shackle	163
707784-3	Lanyard; 3 ft; Shock and Ladder Hook	155
707784-1	Lanyard; 3 ft; Shock; Double Lock	155
707794-1	Lanyard; 6 ft; Shock Absorber; Double Lock	155
707789-1	Lanyard; 6 ft; Web; Internal Shock; Double Lock	155
707789-2	Lanyard; 6 ft; Web; Internal Shock; Form Hook	155
707789-3	Lanyard; 6 ft; Web; Internal Shock; Ladder Hook	155
707794-3	Lanyard; 6 ft; Web; Shock and Form Hook	155
707791-1	Lanyard; 6 ft; Y; 3 Double Locks	155
707790-1	Lanyard; 6 ft; Y; Internal Shock; Double Lock	155
707790-3	Lanyard; 6 ft; Y; Internal Shock; Ladder Hook	155
707790-2	Lanyard; 6 ft; Y; Internal Shock; Stl Twist	155
707791-3	Lanyard; 6 ft; Y; Shock and Form Hook	155
707784-2	Lanyard; Shock Absorber; 3 ft; Form Hook	155
707794-2	Lanyard; Shock Absorber; 6 ft; Form Hook	155
707791-2	Lanyard; Shock Absorber; 6 ft; Y; Form Hook	155
707792-1	Lanyard; Web; Tieback	154
510004	Leo Hoist; 220V; Beta Max	177
707919-1	Leo XXL VFD; 220V; 3PH; Beta Max	178
707939-1	Leo XXL VFD; Wired complete; Beta Max	178
707940-1	Leo XXL VFD; Wireless complete; Beta Max	178
707918-1	Leo XXL; 220V; 3PH; Beta Max	177

Part Number	Product Description	Page Number
P-00250-100	Lifeline; 100 ft; Snaphook	164
P-00261-100	Lifeline; 100 ft; Thimble Only	164
P-00250-150	Lifeline; 150 ft; Snaphook	164
P-00261-150	Lifeline; 150 ft; Thimble Only	164
P-00250-200	Lifeline; 200 ft; Snaphook	164
P-00261-200	Lifeline; 200 ft; Thimble Only	164
P-00250-250	Lifeline; 250 ft; Snaphook	164
P-00261-250	Lifeline; 250 ft; Thimble Only	164
P-00261-300	Lifeline; 300 ft; Thimble Only	164
P-00261-400	Lifeline; 400 ft; Thimble Only	164
P-00250-50	Lifeline; 50 ft; Snaphook	164
P-00250-600	Lifeline; 600 ft; Snaphook	164
702062-1	Limit Switch; Material Hoist	174
702827-1	Low Profile Stirrup	73, 84
701200-1	Low Profile Stirrup Assembly	73
700989-1	LSR1 Winch Assembly	40
702058-2	Material Hoist Frame Assy	174
BD-00012	MiniLite; 11 ft; Web; Stainless Steel	162, 163
MKD003	MKD2 10 ft Floor; Folding	90
MKD008	MKD2 10 ft Side Panel	90
MKD005	MKD2 10 ft Top Rail	90
MKD011	MKD2 2.5 ft Floor	90
MKD012	MKD2 2.5 ft Side Panel	90
MKD013	MKD2 2.5 ft Top Rail	90
MKD002	MKD2 5 ft Floor; Folding	90
MKD007	MKD2 5 ft Side Panel	90
MKD004	MKD2 5 ft Side Rail	90
MKD001	MKD2 End Stirrup; Folding	90
MKD010	MKD2 Floor Pin	90
MKD006	MKD2 Folding Connector Frame	90
MKD009R	MKD2 Wall Roller	90
706131-1	Mod Platform Assy; 10 in.	189
4969-2	Modular Platform Assembly; 10 ft; Dimple Deck	70
4969-3	Modular Platform Assembly; 10 ft; Grating Deck	70
4969	Modular Platform Assembly; 10 ft; Wood Deck	70
700755-2	Modular Platform Assembly; 3 ft Dimple Deck	70
700755-3	Modular Platform Assembly; 3 ft; Grating Deck	70
700755-1	Modular Platform Assembly; 3 ft; Wood Deck	70
4968-2	Modular Platform Assembly; 5 ft; Dimple Deck	70
4968-3	Modular Platform Assembly; 5 ft; Grating Deck	70
4968	Modular Platform Assembly; 5 ft; Wood Deck	70
707711-2	Modular Platform Assembly; 7 ft; Dimple Deck	70
707711-3	Modular Platform Assembly; 7 ft; Grating Deck	70
707711-1	Modular Platform Assembly; 7 ft; Wood Deck	70
4970	Modular Platform Connector Assembly	84
008812-1	Modular Platform Corner Adapter	78, 85
4971	Modular Platform End Adapter	84
008811-2	Modular Platform Endgate Assembly	85
701036-1	Modular Platform Face Roller Assembly	66, 83
701120-2	Modular Platform Fixed Assembly Roller	83
701184-1	Modular Platform Single Line Walk Thru Kit	84
008810-2	Modular Platform Walk Thru Stirrup	73, 84
700777-1	Modular Platform Wheel; Walk Thru Stirrup	85
61.081	Modulo 18 Deck; 0.45 m	87
61.040-05	Modulo 18 End Frame; Astro	87
61.037	Modulo 18 Guard Rail Post	87
61.036	Modulo 18 Guard Rail; 2.3 m	87
61.035	Modulo 18 Side Frame; 2.3 m	87
61.087-03	Modulo 18 Stirrup	87
61.041-03	Modulo 18 U-Frame	87
60.047	Modulo 18 Wall Roller	83
510175	Mud Tub; 1/3 yd; Beta Max	183
510031	Mud Tub; 1/4 yd; Beta Max	183
DNR180R	Netting (see photo)	169
DNR18B	Netting (see photo)	169
DNR750R	Netting (see photo)	169
DNR75B	Netting (see photo)	169
DNR800	Netting (see photo)	169
DNR900	Netting (see photo)	169
WS50	Netting (see photo)	169
510007	New Yorker Plus Hoist; Beta Max	178
P-00248	OBSF Assembly Instructions; Base Plates	102
P-00249	OBSF Assembly Instructions; Casters	102
700809-1	Outrigger Assembly; 6 in. sq; 25 w	95, 112
700819-1	Outrigger Assembly; 6 in. sq; 50 w	95, 113
700757-1	Outrigger Beam Modifications	106

Alphabetical Product Index
(continued)

Part Number	Product Description	Page Number
8-0217-6	Outrigger Kit; 16 ft; 5x5	95, 110
8-0217-7	Outrigger Kit; 22 ft; 5x5	95, 110
8-0217-5	Outrigger Kit; 25 ft; 5x5	95, 110
9-92	Parapet Clamp Assembly; Aluminum; 1000 lb	116
8-0044	Parapet Clamp Assembly; STL; 1500 lb	116
700770-1	Parapet Hook; 13 in.	115
700772-1	Parapet Hook; 20 in.	115
700773-1	Parapet Hook; 27 in.	115
BD-00022	Personal Fall Limiter; 9 ft; Web; Swivel Shackle	162, 163
A-11398	Pin; Coupling; w/ 1 in. Collar	102
P-00096	Pompier Hook	161
Call for part #	Post Mount; Beta Max Mounting System	180
704099-1	Post Shore System	107
BD-00015	Rebar Assembly; 13 Link	156
701270-1	Rebar Web Assembly; 14 in.	156
BD-9099-1	Relief Step Safety Device	153
BD-9099X-12	Relief Step Safety Device; pkg 12	153
8-0281-xx	Remote Control for SC1000/1500	38
BD-00013	Retractable Lifeline; 20 ft x 1 in.	163
BD-00003	Retractable Lifeline; 20 ft; Galvanized Steel Cable	163
BD-00016	Retractable Lifeline; 30 ft; Galvanized Steel Cable	163
BD-00001	Retractable Lifeline; 50 ft; Galvanized Steel Cable	163
4963-02	Ring Girder Assembly; 3.5 in. Plastic	121
4963-01	Ring Girder Assembly; 8 in. Wheel	121
4963-03	Ring Girder Assembly; Steel Wheel	121
SA-1003	Roller Assembly; I-Beam; 16 in.	122
SA-1003-22	Roller Assembly; I-Beam; 22 in.	122
702122-1	Roller Bumper Kit; Clamp On	83
702121-1	Roller Bumper Kit; Extension	83
706067-1	Roller; 5 ft BAP	83
SA-1090	Roller; Adjustable Wall; 48 in.	67, 83
SA-1036-3	Roller; Face Assembly; 3 w/ Clamps	66, 83, 135
SA-1036-4	Roller; Face Assembly; 4 w/ Clamps	66, 83, 135
SA-1036-5	Roller; Face Assembly; 5 w/ Clamps	66, 83, 135
SA-1035	Roller; Philly Wall	66, 83
701864-1	Roller; Side Clamp	83
700525-1	Roller; Tank Top; Pin Style	120
701960-1	Rolling Outrigger Gantry Stand	100
550205	Rope Grab; 3/4 in.; Sgl Jaw	157, 158
701257-1	Rope Grab; 5/8 in.; 3 ft Lanyard	157
701257-2	Rope Grab; 5/8 in.; 4 ft Lanyard	157
701351-1	Rope Grab; 5/8 in.; 4 ft Lanyard; Internal Shock	157
BD-00020	Rope Grab; 5/8 in.; Stainless Steel; Panic	157, 158
BD-00005	Rope Grab; 5/8 in.; Stainless Steel; Trailing	157, 158
539601	Rope Grab; Dodge Mach. Model 12	158
704076	Rope; Safety; 5/8 in.	131, 164
Call for part #	Scaff-Trac; Beta Max Mounting System	180
707917-1	Scorpio XL; 110V; Beta Max	179
A-11397	Screwjack Base w/ Base Plate	102
P-00086	Seam Clamp	170
557026	Shackle; Bolt; 5/8 in.; 3 1/4 Ton	126
702070-1	Sheave Tailboard Block	174
BB-012	Slack Wire Rope Assembly	38
Call for part #	SpiderRail™	166
8-0217-3	Splice Sleeve Assembly; 3 ft; 5x5	106
8-0217-4	Splice Sleeve Assembly; 9 ft; 5x5	106
510029	Spreader Bar; 32 in.; Lite Duty; Beta Max	183
510030	Spreader Bar; 40 in.; Heavy Duty; Beta Max	183
60.591	Spring; Rope Guiding	82
704346-2	SRL; Twin Turbo; ANSI Rebar	156
704346-1	SRL; Twin Turbo; ANSI Snap	156
704346-4	SRL; Twin Turbo; Rebar	156
704346-6	SRL; Twin Turbo; Rebar; Alum	156
704346-3	SRL; Twin Turbo; Snap	156
704346-5	SRL; Twin Turbo; Snap; Alum	156
SA-10842	Stand; Adjustable Outrigger	104
702185-1	Steel Wire Rope	132
701086-1	Steel Work Cage	58
9-3	Stirrup Assembly	82, 85, 87
701464-1R	Stirrup Bar; Rental	38
BB-002	Stirrup Frame Assembly; Long; SC40/30	38
BB-004	Stirrup Frame Assembly; Short; SC40/30	38
BD-00018-HLL	Temporary Horizontal Lifeline Kit	160
P-00245	Termination Plate	164
SA-5001R	Tie Back; 50 ft; Rental	251
SA-1002	Transfer Chain	67, 125

Part Number Product Index

Part Number	Product Description	Page Number
4405-xxx	Wire Rope Assembly (see chart)	128
4775-xxx	Wire Rope Assembly (see chart)	128
4863-xxx	Wire Rope Assembly (see chart)	128
4963-01	Ring Girder Assembly; 8 in. Wheel	121
4963-02	Ring Girder Assembly; 3.5 in. Plastic	121
4963-03	Ring Girder Assembly; Steel Wheel	121
4968-2	Modular Platform Assembly; 5 ft; Dimple Deck	70
4968-3	Modular Platform Assembly; 5 ft; Grating Deck	70
4969-2	Modular Platform Assembly; 10 ft; Dimple Deck	70
4969-3	Modular Platform Assembly; 10 ft; Grating Deck	70
4986-01	Caster Assembly	85
5019-01	Truss Outrigger Assembly; Heavy Duty	118
510020U	Counterweight Clamp Set	181
510052U	Counterweight Clamp Set	181
61.035-0837	Frame; Side; 0.95 m; Modulo 18	87
61.035-1289	Frame; Side; 1.4 m; Modulo 18	87
61.035-1741	Frame; Side; 1.85 m; Modulo 18	87
61.036-0837	Guard Rail; 0.95 m; Modulo 18	87
61.036-1289	Guard Rail; 1.4 m; Modulo 18	87
61.036-1741	Guard Rail; 1.85 m; Modulo 18	87
61.040-05	Modulo 18 End Frame; Astro	87
61.041-03	Modulo 18 U-Frame	87
61.087-03	Modulo 18 Stirrup	87
700018-xxx	Wire Rope Assembly (see chart)	128
700525-1	Roller; Tank Top; Pin Style	120
700558-12-1	Cornice Hook; 12 in.; w/o Bracket	114
700558-21-1	Cornice Hook; 21 in.; w/o Bracket	114
700583-1	Bracket Assembly; Standoff	114
700755-1	Modular Platform Assembly; 3 ft; Wood Deck	70
700755-2	Modular Platform Assembly; 3 ft Dimple Deck	70
700755-3	Modular Platform Assembly; 3 ft; Grating Deck	70
700757-1	Outrigger Beam Modifications	106
700770-1	Parapet Hook; 13 in.	115
700772-1	Parapet Hook; 20 in.	115
700773-1	Parapet Hook; 27 in.	115
700777-1	Modular Platform Wheel; Walk Thru Stirrup	85
700783-1	Hoist; Zmac/1000®	35
700784-1	Hoist Cover; Canvas; Zmac/1000®	38, 135, 171

Part Number	Product Description	Page Number
700809-1	Outrigger Assembly; 6 in. sq; 25 w	95, 112
700819-1	Outrigger Assembly; 6 in. sq; 50 w	95, 113
700903-1	Aluminm Work Cage; w/o Caster	56
700907-2	Work Cage; Caster Assembly	67
700934-1	Flydeck Assembly; 3 ft; Work Cage	66, 68
700939-xxxR	Wire Rope Assembly; 5/16 in.	128
700947-1	Arc Guard; Bottom Assembly;	
	Removable; 500 ft	134, 135
700953-1	Arc Guard; Bottom Assembly;	
	Removable; 1000 ft	135
700956-1	Zmac/1000® Adapter Stirrup	84
700958-1	Zmac/1000® Stirrup	84
700989-1	LSR1 Winch Assembly	40
701018-1R	Hoist Cover; Polypropylene; Zmac/1000®	38, 171
701036-1	Modular Platform Face Roller Assembly	66, 83
701037-1	Work Cage Clamp Assembly; Face Roller	67, 83
701074-1	Insulated Thimble Assembly; Seize End	133, 135
701074-2	Insulated Thimble Assembly;	
	Thimble End	38, 133, 135, 171
701074-3	Insulated Thimble Assembly; Pin Clip End	133
701086-1	Steel Work Cage	58
701108-xxx	Insulated Wire Rope Assembly; Drum Hoists	135
701118-xxx	Insulated Wire Rope Assembly; Traction Hoists	135
701120-2	Modular Platform Fixed Assembly Roller	83
701127-1	Hoist; Zmac/1000® Air	35
701135-1	C-Beam Assembly	117
701151-1	Welding Ground Assembly	38, 67, 133, 135, 171
701184-1	Modular Platform Single Line Walk Thru Kit	84
701200-1	Low Profile Stirrup Assembly	73
701244-1	Harness; Loop; S/M	152
701245-1	Harness; Loop; S/M; Tongue	152
701246-1	Harness; Loop; L/XL	152
701247-1	Harness; Loop; L/XL; Tongue	152
701248-1	Harness; Climbing; S/M; Front D-Ring	152
701249-1	Harness; Climbing; S/M; Tongue	152
701250-1	Harness; Climbing; L/XL	152
701251-1	Harness; Climbing; L/XL; Tongue	152

Part Number Product Index
(continued)

Part Number	Product Description	Page Number
701257-1	Rope Grab; 5/8 in.; 3 ft Lanyard	157
701257-2	Rope Grab; 5/8 in.; 4 ft Lanyard	157
701265-1	Harness; Fall Arrest; L/XL; Waist Belt	151
701267-1	Harness; Fall Arrest; L/XL; Waist Belt; Tongue	151
701270-1	Rebar Web Assembly; 14 in.	156
701301-1	Arc Guard Assembly; SC30/40	38, 135
701301-2	Arc Guard Assembly; Zmac/1000®	38, 133, 135
701305-1	Arc Guard; Bottom Assembly;	
	ST-26 Removable	135
701351-1	Rope Grab; 5/8 in.; 4 ft Lanyard; Internal Shock	157
701353-xxx	Wire Rope Assembly; Green Flex;	
	8.4; FC; Drum Hook	128
701354-xxx	Wire Rope Assembly (see chart)	128
701359-1	Harness; Confined; S/M; Mating	152
701360-1	Harness; Confined; S/M; Tongue	152
701361-1	Harness; Confined; L/XL; Mating	152
701362-1	Harness; Confined; L/XL; Tongue	152
701364-1	Harness; Positioning; S/M; Tongue	151
701365-1	Harness; Positioning; L/XL; Mating	151
701366-1	Harness; Positioning; L/XL; Tongue	151
701372-1	Harness; Stretch Fall Arrest; S/M; Mating	151
701373-1	Harness; Stretch Fall Arrest; L/XL; Mating	151
701374-1	Harness; Stretch Fall Arrest; S/M; Tongue	151
701375-1	Harness; Stretch Fall Arrest; L/XL; Tongue	151
701447-xxx	Wire Rope Assembly (see chart)	128
701450-xxx	Wire Rope Assembly (see chart)	128
701464-1R	Stirrup Bar; Rental	38
701478-xxx	Wire Rope Assembly (see chart)	128
701864-1	Roller; Side Clamp	83
701877-1	Corner Support Post	97
701878-1	Counterweight Beam Sling	103
701881-1	H-Plate Assembly	99
701960-1	Rolling Outrigger Gantry Stand	100
701960-2	Fixed Outrigger Gantry Stand	100
701966-1	F-Weldment Assy; 5x5	104
701990-xxx	Wire Rope Assembly (see chart)	128
702049-1	Air Extension; 36 in.; Whip	45
702058-2	Material Hoist Frame Assy	174
702062-1	Limit Switch; Material Hoist	174
702064-1	Electrical Set; Material Hoist	174
702067-1	End Stop Assembly; 5x5	122, 174
702070-1	Sheave Tailboard Block	174
702096-1	Beam Tie-Down System	105
702121-1	Roller Bumper Kit; Extension	83
702122-1	Roller Bumper Kit; Clamp On	83
702185-1	Steel Wire Rope	132
702396-1	Extended Parapet Clamp	116
702554-1	Bottom Flange Truss Outrigger	119
702827-1	Low Profile Stirrup	73, 84
704099-1	Post Shore System	107
704241-1	5x5 Max Reach Assembly	98, 111
704241-2	5x5 Max Reach Assembly	98, 111
704258-2	Down Under Assembly	96
704346-1	SRL; Twin Turbo; ANSI Snap	156
704346-2	SRL; Twin Turbo; ANSI Rebar	156
704346-3	SRL; Twin Turbo; Snap	156
704346-4	SRL; Twin Turbo; Rebar	156
704346-5	SRL; Twin Turbo; Snap; Alum	156
704346-6	SRL; Twin Turbo; Rebar; Alum	156
705771-1	Adjustable Tank Edge Clamp	124
706067-1	Roller; 5 ft BAP	83
706131-1	Mod Platform Assy; 10 in.	189
707034-1	Drill Bench Assy; Mod Platform	84
707711-1	Modular Platform Assembly; 7 ft; Wood Deck	70
707711-2	Modular Platform Assembly; 7 ft; Dimple Deck	70
707711-3	Modular Platform Assembly; 7 ft; Grating Deck	70
707782-1	Harness; Stretch Constructor; S/M; Tongue	152
707782-2	Harness; Stretch Constructor; L/XL; Tongue	152
707782-3	Hanress; Stretch Constructor; XXL; Tongue	152
707783-1	Harness; Basic Fit; S/M; Tongue	150
707783-2	Harness; Basic Fit; L/XL; Tongue	150
707783-3	Harness; Basic Fit; XXL; Tongue	150
707784-1	Lanyard; 3 ft; Shock; Double Lock	155
707784-2	Lanyard; Shock Absorber; 3 ft; Form Hook	155
707784-3	Lanyard; 3 ft; Shock and Ladder Hook	155

Part Number	Product Description	Page Number
707785-1	Harness; Basic Fit; S/M; Mating	150
707785-2	Harness; Basic Fit; L/XL; Mating	150
707785-3	Harness; Basic Fit; XXL; Mating	150
707786-1	Harness; Stretch Constructor; S/M; Mating	152
707786-2	Harness; Stretch Constructor; L/XL; Mating	152
707786-3	Harness; Stretch Constructor; XXL; Mating	152
707787-1	Harness; Constructor; S/M; Tongue	152
707787-2	Harness; Constructor; L/XL; Tongue	152
707787-3	Harness; Constructor; XXL; Tongue	152
707788-1	Harness; Constructor; S/M; Mating	152
707788-2	Harness; Constructor; L/XL; Mating	152
707788-3	Harness; Constructor; XXL; Mating	152
707789-1	Lanyard; 6 ft; Web; Internal Shock; Double Lock	155
707789-2	Lanyard; 6 ft; Web; Internal Shock; Form Hook	155
707789-3	Lanyard; 6 ft; Web; Internal Shock; Ladder Hook	155
707790-1	Lanyard; 6 ft; Y; Internal Shock; Double Lock	155
707790-2	Lanyard; 6 ft; Y; Internal Shock; Stl Twist	155
707790-3	Lanyard; 6 ft; Y; Internal Shock; Ladder Hook	155
707791-1	Lanyard; 6 ft; Y; 3 Double Locks	155
707791-2	Lanyard; Shock Absorber; 6 ft; Y; Form Hook	155
707791-3	Lanyard; 6 ft; Y; Shock and Form Hook	155
707792-1	Lanyard; Web; Tieback	154
707793-1	Harness; Fall Arrest; S/M; Tongue	151
707793-2	Harness; Fall Arrest; L/XL; Tongue	151
707793-3	Harness: Fall Arrest: XXL; Tongue	151
707794-1	Lanyard; 6 ft; Shock Absorber; Double Lock	155
707794-2	Lanyard; Shock Absorber; 6 ft; Form Hook	155
707794-3	Lanyard; 6 ft; Web; Shock and Form Hook	155
707795-1	Harness; Fall Arrest; S/M; Standard	151
707795-2	Harness; Fall Arrest; L/XL; Standard	151
707795-3	Harness: Fall Arrest: XXL; Mating	151
707917-1	Scorpio XL; 110V; Beta Max	179
707918-1	Leo XXL; 220V; 3PH; Beta Max	177
707919-1	Leo XXL VFD; 220V; 3PH; Beta Max	178
707939-1	Leo XXL VFD; Wired complete; Beta Max	178
707940-1	Leo XXL VFD; Wireless complete; Beta Max	178
707942-1U	I-Beam Suspension Bracket	181
707959-1	Wheelbarrow Sling; Heavy Duty; Beta Max	183

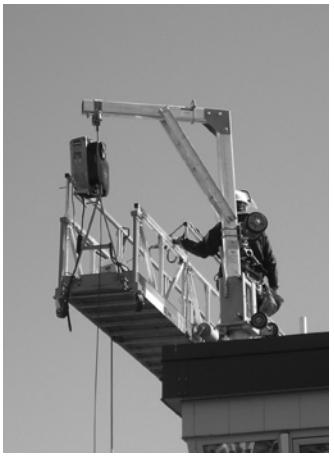
Part Number	Product Description	Page Number
8-0044	Parapet Clamp Assembly; STL; 1500 lb	116
8-0108R	Filter/Lubricator; Rental	247
8-0217-3	Splice Sleeve Assembly; 3 ft; 5x5	106
8-0217-4	Splice Sleeve Assembly; 9 ft; 5x5	106
8-0217-5	Outrigger Kit; 25 ft; 5x5	95, 110
8-0217-6	Outrigger Kit; 16 ft; 5x5	95, 110
8-0217-7	Outrigger Kit; 22 ft; 5x5	95, 110
8-0278	90° Hoist Adapter	38, 85, 174
8-0281-xx	Remote Control for SC1000/1500	38
8-0406	20° Hoist Adapter	38, 85
93-001	Cross Beam Assembly	82, 85
94-001	Hoist Cover; SC30/40	38, 135, 171
A-11393	Frame; Outrigger; 5x4	102
A-11394	Caster w/ Stem	102
A-11395	Cross Brace; 12 ft x 4 ft	102
A-11396	Cross Brace; 12 ft x 3 ft	102
A-11397	Screwjack Base w/ Base Plate	102
A-11398	Pin; Coupling; w/ 1 in. Collar	102
A-11835	Caster w/ Stem; 1200 lb load	102, 126
A-11934	Caster w/ Stem; 750 lb load	126
BB-002	Stirrup Frame Assembly; Long; SC40/30	38
BB-004	Stirrup Frame Assembly; Short; SC40/30	38
BB-012	Slack Wire Rope Assembly	38
BD-00001	Retractable Lifeline; 50 ft; Galvanized Steel Cable	163
BD-00003	Retractable Lifeline; 20 ft; Galvanized Steel Cable	163
BD-00005	Rope Grab; 5/8 in.; Stainless Steel; Trailing	157, 158
BD-00006	Cross Arm Strap; 6 ft; D-Rings; Blk	161
BD-00007	Wire Hook	161
BD-00008	Anchor; Beam; Horizontal; Lightweight; 4-12	159
BD-00009	Anchor; 3/4 in.; 5K; Fall Arrest	160
BD-00010	Lanyard; 10 ft; Web Retractable; Swivel Shackle	163
BD-00011	Cross Arm Strap; 3 ft; D-Rings; Blk	161
BD-00012	MiniLite; 11 ft; Web; Stainless Steel	162, 163
BD-00013	Retractable Lifeline; 20 ft x 1 in.	163
BD-00014	Cross Arm Strap; 4 ft; D-Rings; Blk	161
BD-00015	Rebar Assembly; 13 Link	156
BD-00016	Retractable Lifeline; 30 ft; Galvanized Steel Cable	163

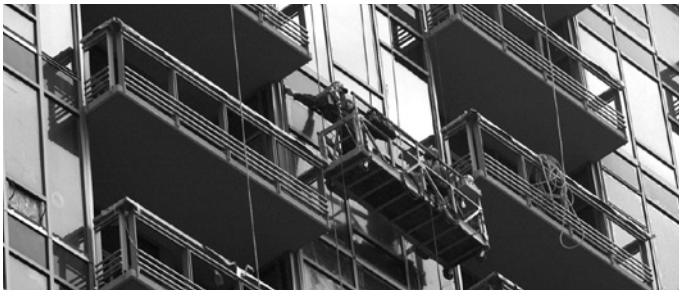
Part Number Product Index
(continued)

Part Number	Product Description	Page Number
BD-00017	Anchor; Eye Bolt; Temporary	161
BD-00018	Anchor; 1 in.; 10K; Fall Arrest	160
BD-00018-HLL	Temporary Horizontal Lifeline Kit	160
BD-00019	Anchor; 1 in.; 2K; Material	126
BD-00020	Rope Grab; 5/8 in.; Stainless Steel; Panic	157, 158
BD-00021	Cable; 9 ft; Galvanized Swivel Shackle	163
BD-00022	Personal Fall Limiter; 9 ft; Web;	
	Swivel Shackle	162, 163
BD-9099-1	Relief Step Safety Device	153
BD-9099X-12	Relief Step Safety Device; pkg 12	153
Call for part #	Fixed I-Beam; Beta Max Mounting System	180
Call for part #	I-Beam Trolley; Beta Max Mounting System	180
Call for part #	Post Mount; Beta Max Mounting System	180
Call for part #	Scaff-Trac; Beta Max Mounting System	180
Call for part #	SpiderRail™	166
Call for part #	Trestle Monorail; Beta Max Mounting System	180
DNR180R	Netting (see photo)	169
DNR18B	Netting (see photo)	169
DNR750R	Netting (see photo)	169
DNR75B	Netting (see photo)	169
DNR800	Netting (see photo)	169
DNR900	Netting (see photo)	169
MKD001	MKD2 End Stirrup; Folding	90
MKD002	MKD2 5 ft Floor; Folding	90
MKD003	MKD2 10 ft Floor; Folding	90
MKD004	MKD2 5 ft Side Rail	90
MKD005	MKD2 10 ft Top Rail	90
MKD006	MKD2 Folding Connector Frame	90
MKD007	MKD2 5 ft Side Panel	90
MKD008	MKD2 10 ft Side Panel	90
MKD009R	MKD2 Wall Roller	90
MKD010	MKD2 Floor Pin	90
MKD011	MKD2 2.5 ft Floor	90
MKD012	MKD2 2.5 ft Side Panel	90
MKD013	MKD2 2.5 ft Top Rail	90
P-00086	Seam Clamp	170
P-00096	Pompier Hook	161
P-00130-1	Fold-Up Work Cage; 8 ft Internal Mount	60
P-00130-2	Fold-Up Work Cage; 8 ft External Mount	60
P-00130-3	Fold-Up Work Cage; 6 ft Internal Mount	60
P-00130-4	Fold-Up Work Cage; 6 ft External Mount	60
P-00130-5	Fold-Up Work Cage; 4 ft External Mount	60
P-00146-01	Wedge Socket; 3/8 in.; Crosby®;	
	Terminator	130, 135
P-00213	Cable Grab; 5/16 in.; Stainless Steel; (K)	158
P-00227	Beam Clamp; 4.5-12 in.; Vertical	159
P-00228	Carabiner; Twist Lock; 115.7 mm	161
P-00236	Anchor; Roof; Nail Down	170
P-00245	Termination Plate	164
P-00247-201	Angular; Stirrup; Fold-Up	61
P-00248	OBSF Assembly Instructions; Base Plates	102
P-00249	OBSF Assembly Instructions; Casters	102
P-00250-100	Lifeline; 100 ft; Snaphook	164
P-00250-150	Lifeline; 150 ft; Snaphook	164
P-00250-200	Lifeline; 200 ft; Snaphook	164
P-00250-250	Lifeline; 250 ft; Snaphook	164
P-00250-50	Lifeline; 50 ft; Snaphook	164
P-00250-600	Lifeline; 600 ft; Snaphook	164
P-00261-100	Lifeline; 100 ft; Thimble Only	164
P-00261-150	Lifeline; 150 ft; Thimble Only	164
P-00261-200	Lifeline; 200 ft; Thimble Only	164
P-00261-250	Lifeline; 250 ft; Thimble Only	164
P-00261-300	Lifeline; 300 ft; Thimble Only	164
P-00261-400	Lifeline; 400 ft; Thimble Only	164
P-00601	Anchor; Roof; Screw Down	170
SA-1002	Transfer Chain	67, 125
SA-1003	Roller Assembly; I-Beam; 16 in.	122
SA-1003-1	Bracket; Flange Adapter	122
SA-1003-22	Roller Assembly; I-Beam; 22 in.	122
SA-1035	Roller; Philly Wall	66, 83
SA-1036-3	Roller; Face Assembly; 3 w/ Clamps	66, 83, 135
SA-1036-4	Roller; Face Assembly; 4 w/ Clamps	66, 83, 135
SA-1036-5	Roller; Face Assembly; 5 w/ Clamps	66, 83, 135
SA-1037	Bumper; Adjustable Wall	67, 83
SA-1039	Clamp; I-Beam Assembly; 8 in.	123
SA-1040	Clamp; I-Beam Assembly; 13.5 in.	123

Part Number	Product Description	Page Number
SA-1045	Clamp; Rail	67
SA-1050	Flydeck; 2 ft	66, 68
SA-1051	Flydeck; 3 ft	66, 68
SA-1052	Flydeck; 2 ft Demountable	66, 68
SA-1053	Flydeck; 3 ft Demountable	66, 68
SA-1072	Ground Dolly; Standard	67
SA-1073	Hook; Rigging; Small	116
SA-1083	Arc Guard Kit; 500 ft; Drum	67, 134
SA-1083-1000	Arc Guard Kit; 1000 ft; Drum	67, 134
SA-1083-26	Arc Guard Kit; Complete; ST-26	67, 134
SA-10842	Stand; Adjustable Outrigger	104
SA-1089	Bracket; Parapet Adjustable Standoff	115
SA-1090	Roller; Adjustable Wall; 48 in.	67, 83
SA-1579	Channel Beam Hook	115
SA-3065	Ground Dolly; ST-19	67
SA-3205	Hook; Rigging; Large	116
SA-4474	Truss Outrigger Assembly	118
SA-5001R	Tie Back; 50 ft; Rental	251

Part Number	Product Description	Page Number
SC30	Hoist; Air Traction	34
SC40	Hoist; Electric; Traction	33
ST-17	Hoist; Air Drum	44
ST-17-10-xxx	Hoist; SST Cage; 18 in. Eye Splice; Arc Guard Kit	45
ST-17-3-xxx	Hoist; Aluminum Cage; Thimble	45
ST-17-4-xxx	Hoist; Aluminum Cage; 18 in. Eye Splice	45
ST-17-5-xxx	Hoist; Aluminum Cage; Thimble; Arc Guard Kit	45
ST-17-6-xxx	Hoist; Aluminum Cage; 18 in. Eye Splice;	
	Arc Guard Kit	45
ST-17-7-xxx	Hoist; SST Cage; Thimble	45
ST-17-8-xxx	Hoist; SST Cage; 18 in. Eye Splice	45
ST-17-9-xxx	Hoist; SST Cage; Thimble; Arc Guard Kit	45
ST-180	Hoist; Electric; Drum; 220V	54
ST-19A	Hoist; Demountable Air	48
ST-19E	Hoist; Demountable Electric	49
ST-26	Hoist; Mini Air	52
WS50	Netting (see photo)	169





Disclaimers

- The content contained in this catalog is for informational purposes only. For actual specifications, illustrations and information, consult the Operators' Manual or a Spider professional.
- Information is subject to change.
- Not all products are available in all areas. Consult your Spider professional for availability.
- Verify product specifications for your federal, state, province or local code compliance.

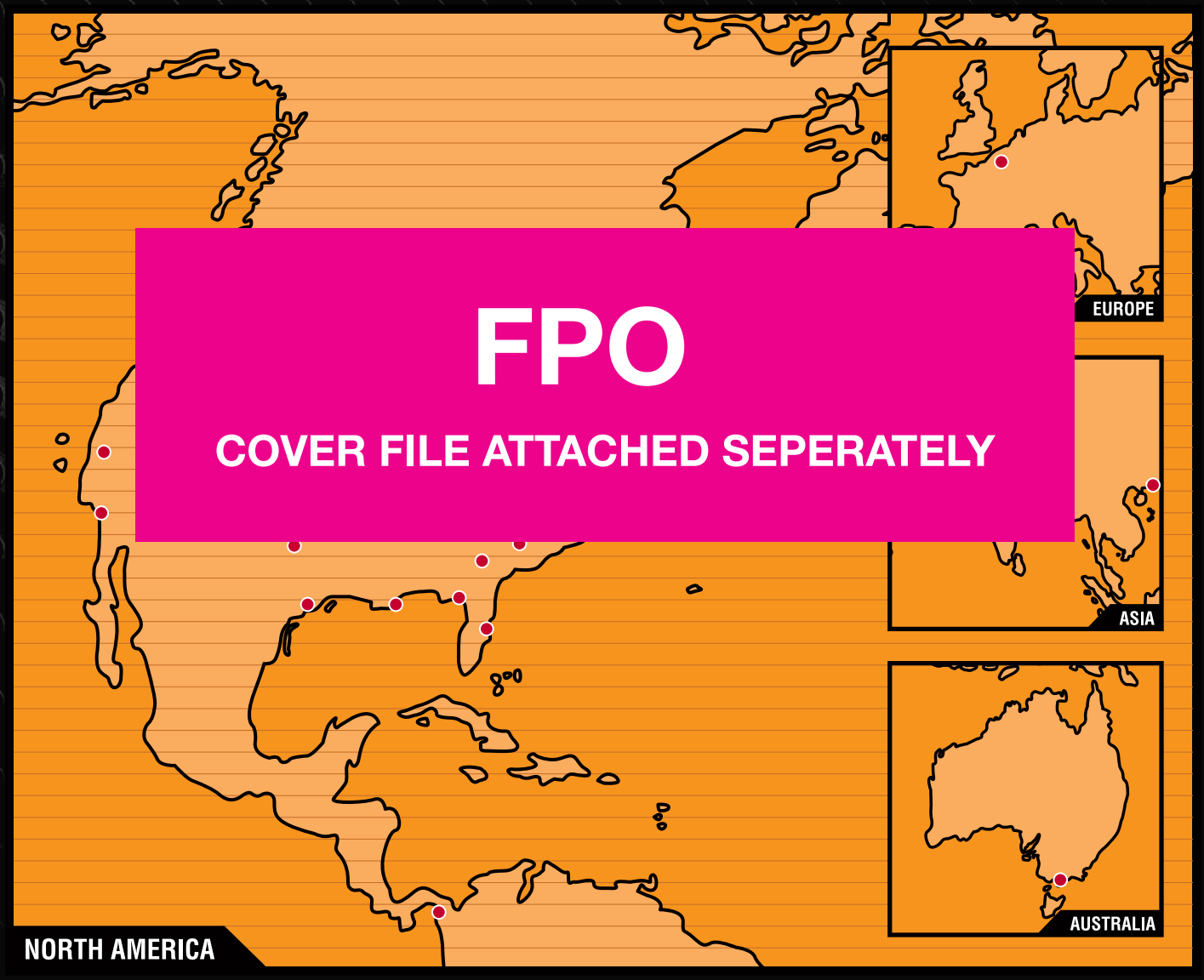
Spider's sales, service and support network extends throughout North America and in several locations around the globe.

Spider Facilities

Atlanta
Boston
Charlotte
Chicago
Cleveland
Dallas
Denver
Detroit
Houston
Kansas City
Las Vegas
Minneapolis
New Orleans
New York
Orlando
Pensacola
Philadelphia
Portland
St Louis
San Francisco
Seattle
Vancouver, B.C.
Washington DC/Baltimore

Also:

Antiwerp
Barcelona
Dubai
Hong Kong
Melbourne
Mumbai
Panama City



More information online at **www.spiderstaging.com**

Spider Sales/Service/Rental Contact Information
National Toll Free 1-877-774-3370
spider@spiderstaging.com

Corporate Address
Spider, a division of SafeWorks, LLC
365 Upland Drive
Seattle, WA 98188

Spider®
A Division of SafeWorks, LLC