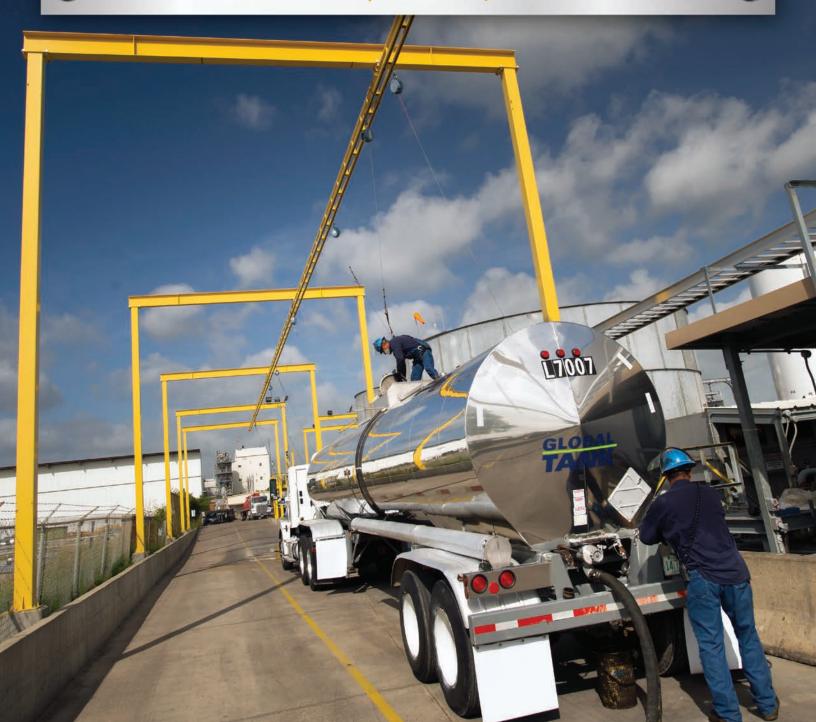


FALL PROTECTION SOLUTIONS

PERMANENT | MOBILE | CUSTOM







RIGID LIFELINES

Rigid Rail Leaders	5
Our Products	

Anchor Track™ Rigid Rail Systems	
----------------------------------	--

Permanent Anchor Track™ Systems 10

Mobile Anchor Track™ Systems 20

Custom Fall Protection Systems 26

Why Rigid Lifelines? 28

Laws and Codes 30

How to Buy 31





RIGID RAIL LEADERS

For 20 years, Rigid Lifelines® has been engineering, designing, and testing rigid rail fall protection systems. All of our rigid rail systems comply with OSHA 1910, OSHA 1926, and ANSI Z359 standards. By meeting OSHA and ANSI regulations, our rigid rail systems reduce workplace risks and protect your workers from hazards. Our knowledge of fall protection codes allows our engineers to stay current while pursuing new, safer solutions for working at height. By serving on the ANSI Fall Protection Code committee and several ANSI sub-committees, our engineers work closely with building architects, engineers, and safety personnel to assist you in any way we can.

Our fully customized solutions have also helped develop our rigid rail systems because unique situations force us to provide innovative solutions. In fact, these new solutions can be incorporated into our standardized product line, readily available if similar applications arise. In addition, our bi-coastal manufacturing allows us to serve customers on the east and west coast and everywhere in between. Our large manufacturing facilities provide enough space to manufacture systems quickly and to stock a large quantity of replacement parts available for fast shipping.

Our quality control and manufacturing protocols guarantee that we provide exceptional systems. We are an ISO 9001 registered company, meaning our systems fulfill international criteria for quality and safety. Our quality management and inspectors thoroughly examine each system throughout the manufacturing process to ensure system quality. Our certified welding also assures the quality of our rigid rail systems. All of our welders have their performance certified by the American Welding Society (AWS) in both Steel D1.1 and Aluminum D1.2. Furthermore, both of our facilities have achieved "AWS Certified Welding Fabricator" status, meaning we demonstrate the resources, procedures, and personnel needed to apply a quality management system to our welding fabrication.

We offer 13 permanent or mobile Anchor Track™ Systems, including the mobile Griffin™ and permanent Traveling Bridge. All of our Anchor Track Systems feature our enclosed Anchor Track and Anchor Trolley™ technology. Our Anchor Track eliminates the bounce effect and reduces the potential for secondary fall injuries. Our Anchor Trolley offers effortless movement, minimizes post-fall drift, and increases self-rescue ability. The zero-deflection of our rigid Anchor Track Systems means that our fall distances and deceleration forces are a fraction of those experienced by users of overhead cable systems.

All of our Anchor Track Systems and components as well as some wearable parts, such as Anchor Trolley wheels and teeth, come with a 10-year warranty coverage. For a full Warranty and Service Policy, email us at **info@RigidLifelines.com**.

We hope that you find everything you need to keep your workers more secure while working at height. If you can't find what you're looking for, let us know. You can send us an email at **sales@RigidLifelines.com** or give us a call at **800-869-2080**. One of our technical sales specialists will be happy to assist you.

TRACKS FOR FALL PROTECTION

High Performance, Low Maintenance

Rigid Lifelines * tracks are self-cleaning, so trolleys continuously roll with minimal resistance. The enclosed track also protects trolley wheels while ensuring their accurate alignment. Plus, our rigid track design saves up to three feet of headroom because—unlike wire rope systems—there is no need for a "sag allowance."

Plain Track: PT Series

- Our lowest profile design keeps installation space requirements to a minimum
- Track can be custom-curved for specific paths

Trussed Track: R Series

- Trussed design spans greater distance between supports
- Combination of high-strength to low-weight ratio reduces stress on structures

Dual Trussed Track: DST Series

 All the advantages of the trussed design, but dual tracks allow two or more users to pass each other in the same work area

Triple Trussed Track: TST Series

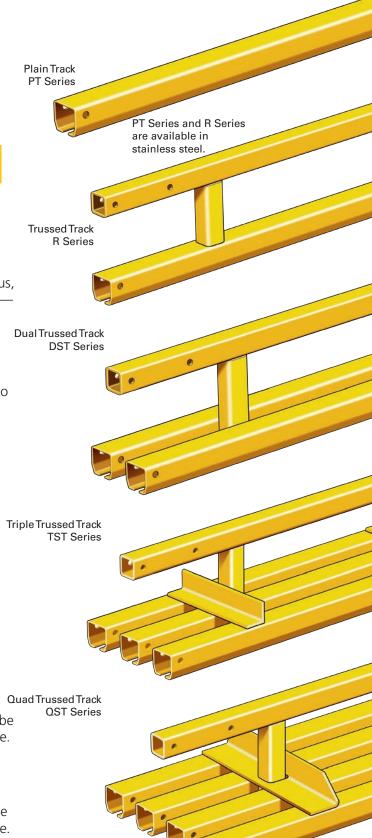
• All the advantages of the trussed design, but three workers can be connected and pass one another within the protected workspace.

Quad Trussed Track: QST Series

 All the advantages of the trussed design, but four workers can be connected and pass one another within the protected workspace.

Alu-Track® Series

- Extruded from high-strength 6061-T6 aluminum alloy
- Virtually maintenance-free aluminum is suitable for clean rooms, refrigeration areas, and other controlled environments



Alu-Track® Series

Track Options

- Alu-Track[®]
- Steel track: rolled from ASTM A572, A607, or A715 grade steel; available with enamel, powder, epoxy, or galvanized coatings
- Stainless steel track: 304 stainless for 500 Series track
- Mylar[™] lip seal: for additional track protection from very heavy dust or paint overspray applications



Track Hardware

Plain Track Flush Mount

Mount either parallel or perpendicular to ceiling beams.



Sloped Hangers with drop rods accommodate slopes up to 14 degrees. Call us for system applicability.



Drop-rod hangers require sway bracing.



Features support bracket, 12-inch drop rod, and adjustable roof beam clamp. Sway bracing is required.

Drop-rod hangers require sway bracing.



End Stop Bumper

is standard on all systems. Bumper is through-bolted to track ends; resilient rubber increases impact resistance.



Trussed Track Flush-Cross Mount

Customers can hang a truss track perpendicular to their existing structural beam.



Plain Track Splice

Precisely align and connect track sections using two vertical and four horizontal adjustment screws (provided).



Trussed Track Drop Rod Hanger Assembly

Features support bracket, 12-inch drop rod, and adjustable roof beam clamp. Sway bracing is required.

Drop-rod hangers require sway bracing.



Trussed Track Splice

This two-piece splice features the same splice as above. The second piece is a plate for truss. Hardware is provided.



ANCHOR TROLLEY

Minimizing Track Drift

The Anchor Trolley™ is our ultimate innovation in rolling trolley technology. The Anchor Trolley is designed with cone teeth made of hardened alloy steel that act as a braking mechanism and engage the steel track in the event of a fall. The engagement of the trolley teeth and track causes the trolley to anchor into place without damaging the track, virtually eliminating post-fall drift on the track. The Anchor Trolley greatly increases the opportunity for conscious and able-bodied workers to perform a self-rescue after a fall event. Like our other trolleys, the Anchor Trolley is made from non-consumable materials while being weather-proof and temperature-proof. This design ensures that you still have the same smooth movement that has come to be associated with Rigid Lifelines® enclosed track fall arrest trolleys.

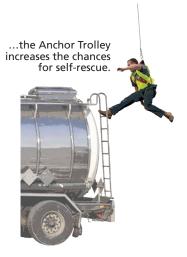
Features

- Reduces drifting on the track after a fall event
- Increases the chances for self-rescue
- Comes standard with Anchor Track Systems from Rigid Lifelines



Greatly Reduces Risk of Suspension Trauma





Without the Anchor Trolley, chances for self-rescue diminish.







Hardened steel teeth activate and arrest any trolley movement when any force greater than 80 pounds, including the weight of the self-retracting lanyard, is applied. 80 lbs.

Super Responsive Trolleys

For fall arrest systems, how the trolley rolls is the difference between user frustration and enthusiastic user acceptance. Our multi-prong approach to minimum rolling resistance is:

- Enclosed tracks: protecting trolley wheels and their alignment
- Self-cleaning tracks
- Sealed bearings for trolley wheels

Rigid Lifelines' trolleys readily and effortlessly follow their user. They're also super responsive. After the user stops moving, the self-retracting lanyard brings the trolley as close as possible to the worker.

Swiveling Connector Eliminates Side-Loading Stress

On many of our Anchor Track Systems, users are free to travel up to 30 degrees off-plumb of the track. On competing systems, that sort of travel would cause side-loading stress to the trolley's swiveling connector.

By comparison, the swiveling connector on our Anchor Trolley rotates 360 degrees—preventing the lanyard's strap from getting twisted. And the swiveling connector also swivels 180 degrees off-plumb to minimize side-loading stresses. These swiveling and pivoting actions are virtually imperceptible to the user. Together, they provide maximum freedom of movement and minimal equipment wear.

CEILING-MOUNTED MONORAIL

Fall Protection without Loss of Floor Space

Rigid Lifelines Ceiling-Mounted Monorail **Anchor Track System** easily mounts to existing structures and can support long runs and curves.

Users travel the track's fixed path, but with the ability to move up to 30 degrees off-plumb—all while benefiting from rigid track protection (minimal fall distance). This system is widely used for protected worker mobility for vehicle loading/unloading, industrial cleaning, and maintenance tasks.

Our monorail system can be readily installed in buildings with very tall ceilings. It's available:

- As individual components, or
- As a complete system kits, or
- As a custom-engineered system to meet your specific needs



Application Options

- 2-way or 3-way switches allow multiple users to move in different directions on the same track
- Single, dual, or multiple tracks for use by one, two, or multiple workers
- Tracks can be mounted to a sloped beam up to 14 degrees using sloped hangers with drop rods
- Stainless steel track available
- Curved track

Design

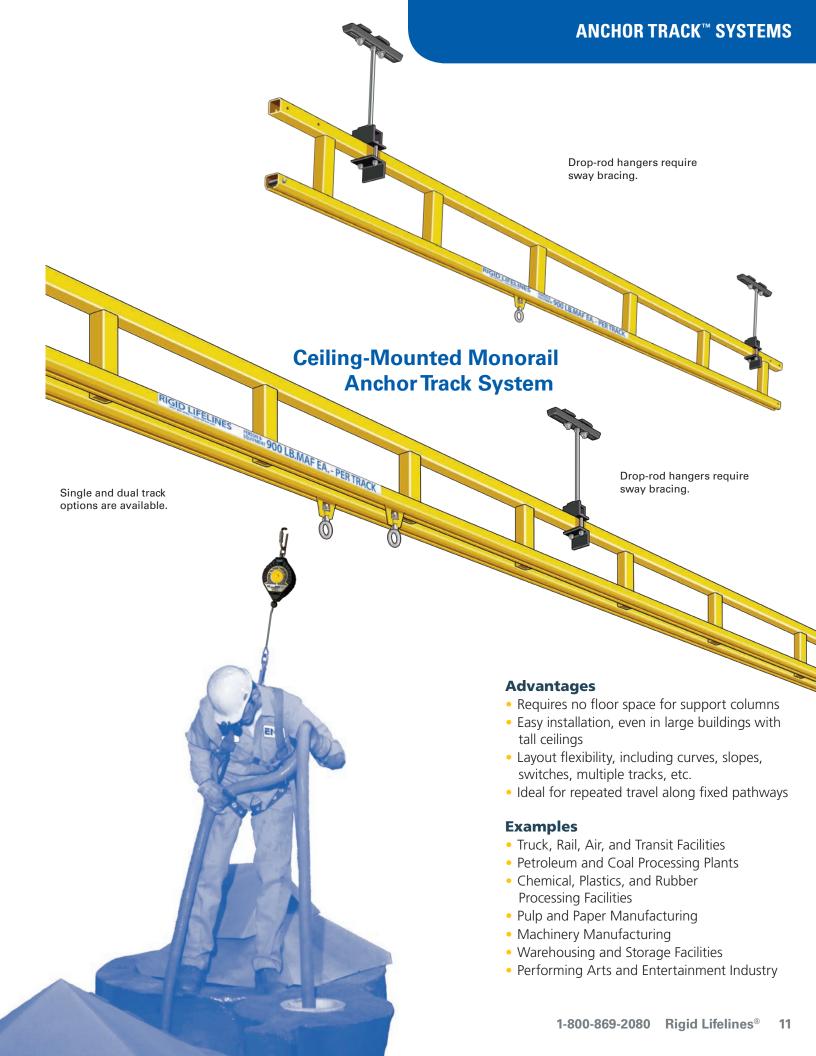
Track(s) attaches to existing structures

Support Structures

Tracks are mounted either:

- Flush-cross mounted to ceiling beams, or
- Flush-parallel mounted to the ceiling beams, or
- Mounted with any length drop rods (requires sway bracing), including hangers for slopes up to 14 degrees





TRAVELING BRIDGE

360-Degree User Movement

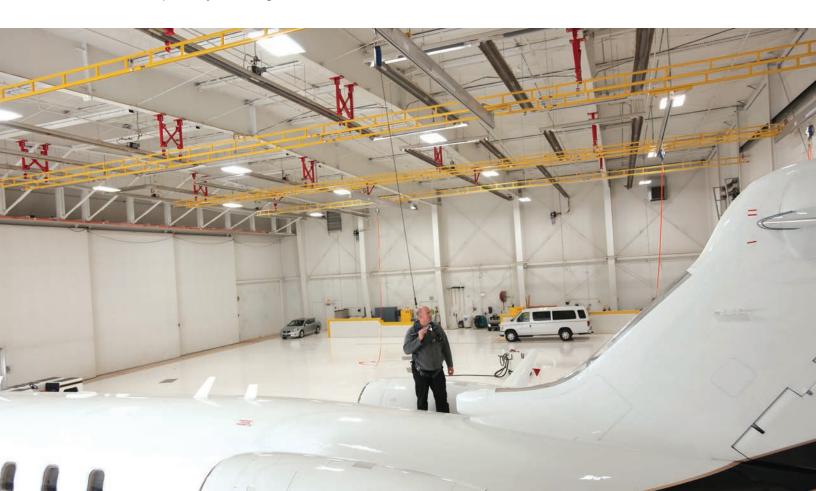
Rigid Lifelines Traveling Bridge Anchor Track **System** features a trolley that traverses a traveling bridge. The traveling bridge, in turn, glides along two mounted runways.

With the double axes, the trolley can effortlessly follow the user in any direction (360 degrees). The worker's attachment point is always centered over his or her head—minimizing swing fall hazards—something not possible on wire rope or I-beam systems.

Ceiling-mounted systems are mounted either parallel or perpendicular (cross) to the building's existing ceiling support beams. Flush-mount hangers maximize working heights, while a drop-rod hanger with sway bracing can be used to overcome overhead obstacles.

Freestanding systems are compatible with large overhead cranes because they only come up to the length of the freestanding columns. Freestanding systems can also be easily repositioned when workflow or plant layout changes.







FREESTANDING SYSTEMS



For Long Outdoor Paths with No Existing Structures

Rigid Lifelines° Freestanding Anchor Track

Systems provide permanently installed fall protection over long spans where there are no existing structures.

Inverted-L Anchor Track System

Wide flange steel columns with gusset reinforcements hold cantilevered headers from which the track(s) hangs. Each frame consists of a freestanding column topped with a header that forms the "L."

- With three or more frames, track lengths are virtually unlimited.
- Trolley-hook height starting at 22 feet allows access to the tops of railroad cars, tankers, trailers, outdoor equipment, and systems
- Standard arm reach begins at 8 feet
- Requires concrete foundations

Inverted-U Anchor Track System

Steel columns hold I-beam headers from which the track(s) hangs. Each frame consists of two freestanding columns topped with a header that forms the "U."

- With three or more frames, track lengths are virtually unlimited.
- May require concrete foundations, but they are smaller than the foundations required by other cantilevered systems
- Heights and track lengths are available per application

T-Frame Anchor Track System

Steel columns hold I-beam headers from which the track(s) hangs. Each frame consists of a freestanding column topped with a header that forms the "T."

- With three or more frames, the parallel tracks can be designed to span any length.
- Service two lines of vehicles with only one row of columns
- Requires concrete foundations



Application Options

- Single, dual, or multiple tracks for use by one, two, or multiple workers
- Custom designs for your facilities' unique demands; includes custom-sized cantilevers and/or support structures
- Curved track

Design

Track(s) attaches to headers supported by freestanding columns

Support Structures

Three different designs, each with freestanding columns supporting header-attached trussed track(s)

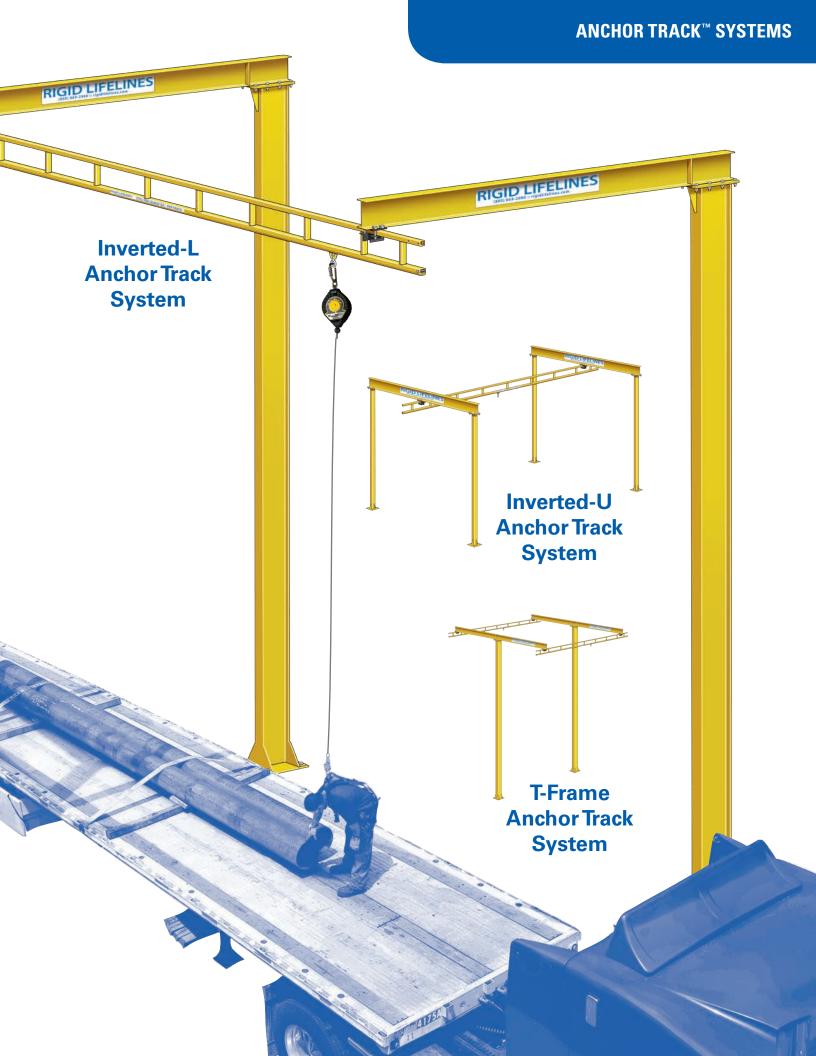
Advantages

Long spans of fall protection coverage in areas without existing structures

Examples

- Railcar Sidings
- Truck Loading, Securing, and Tarping
- Tank Car Loading and Servicing (e.g., water tankers)
- Agricultural Transportation
- Logging: Securing and Unloading
- Oil and Gas Extraction
- Petroleum and Coal Processing
- Manufacturing and Maintenance of Large Vehicles and Equipment





FOLD-AWAY

Compatible with Overhead Cranes and Space Restricted Work Areas

Rigid Lifelines Fold-Away Anchor Track System

is ideal for facilities needing a fall arrest system that folds up and out of the way.

When the arms are fully extended, the system provides workers with a fixed path of rigid track fall protection. Users can travel up to 30 degrees off-plumb of the track.

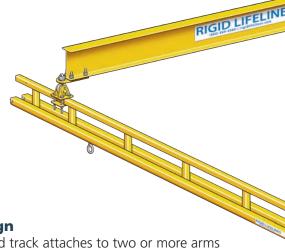
When not in use, the track and its arms can be folded against their support columns (e.g., the wall), leaving room for large overhead cranes. Locking mechanisms keep the system locked in place during use or storage.

Monorail track lengths of 40 feet or more allow multiple work areas to be covered by a single fall protection system.

Application Options

- Single, dual, or multiple tracks for one, two, or multiple workers
- Larger systems using three or more arms typically have motorized rotation with electric motors
- Available as a standard kit or custom engineered solution





Design

Trussed track attaches to two or more arms that fold away when not in use

Support Structure

Arms attach to existing building columns or to freestanding columns

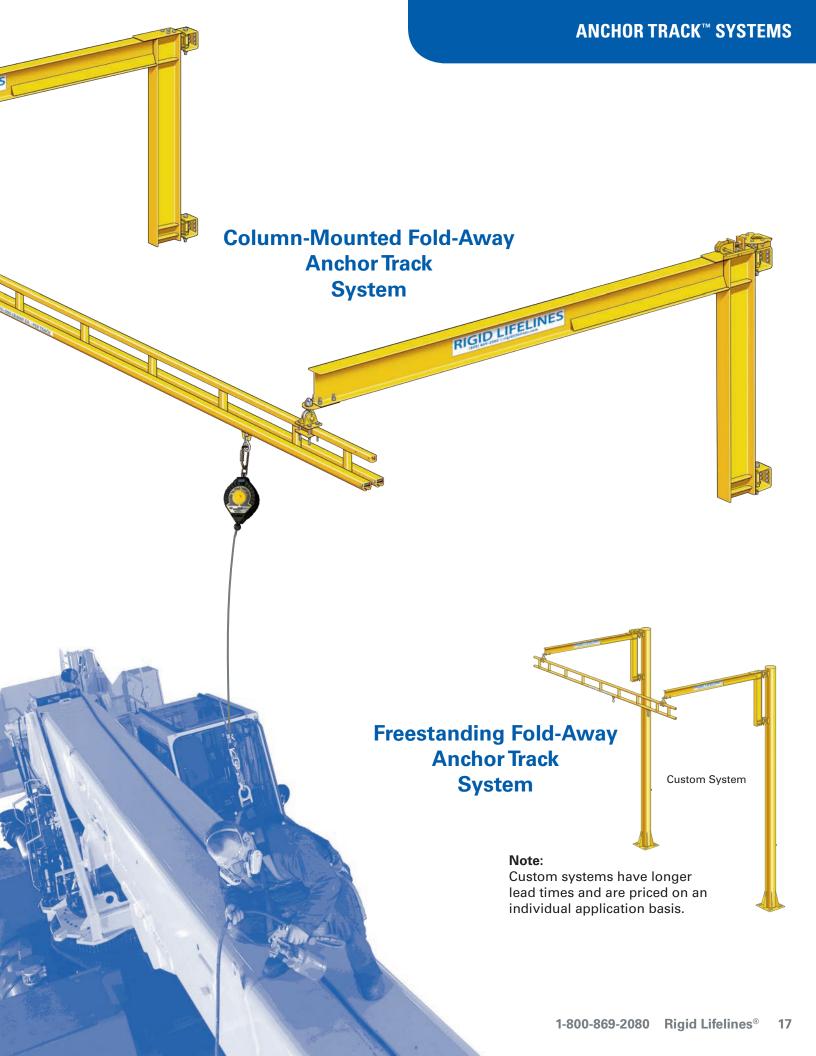
Advantages

- System folds out of the way for overhead cranes
- Ideal for narrow bays with inaccessible ceilings
- Excellent for space-restricted facilities
- Span multiple work areas with one system

Examples

- Railroad and Truck Transportation Facilities
- Utilities
- Food Processing Facilities
- Petroleum and Coal Processing
- Plastics and Rubber Manufacturing
- Primary Metals Manufacturing





POST SUSPENSION

Wide Coverage with Fewer Materials

Rigid Lifelines® Post Suspension Anchor Track

System designs deliver fall protection coverage to areas where conventional multiple columns cannot be installed due to obstacles or space restrictions.

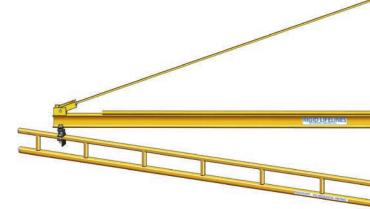
Available as a single post, multiple post, or twin bay system (tracks on both sides of posts), our Post Suspension system can also be economical, requiring fewer foundations and 60-percent less steel than conventional designs.

Single Post System

- Requires only one foundation
- Single post is ideal for space-restricted or obstacle-filled areas
- Standard track lengths are up to 60 feet
- Standard trolley-hook height is 22 feet (custom heights available)

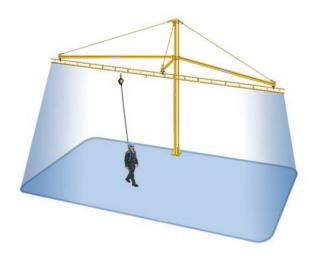
Multiple Post System

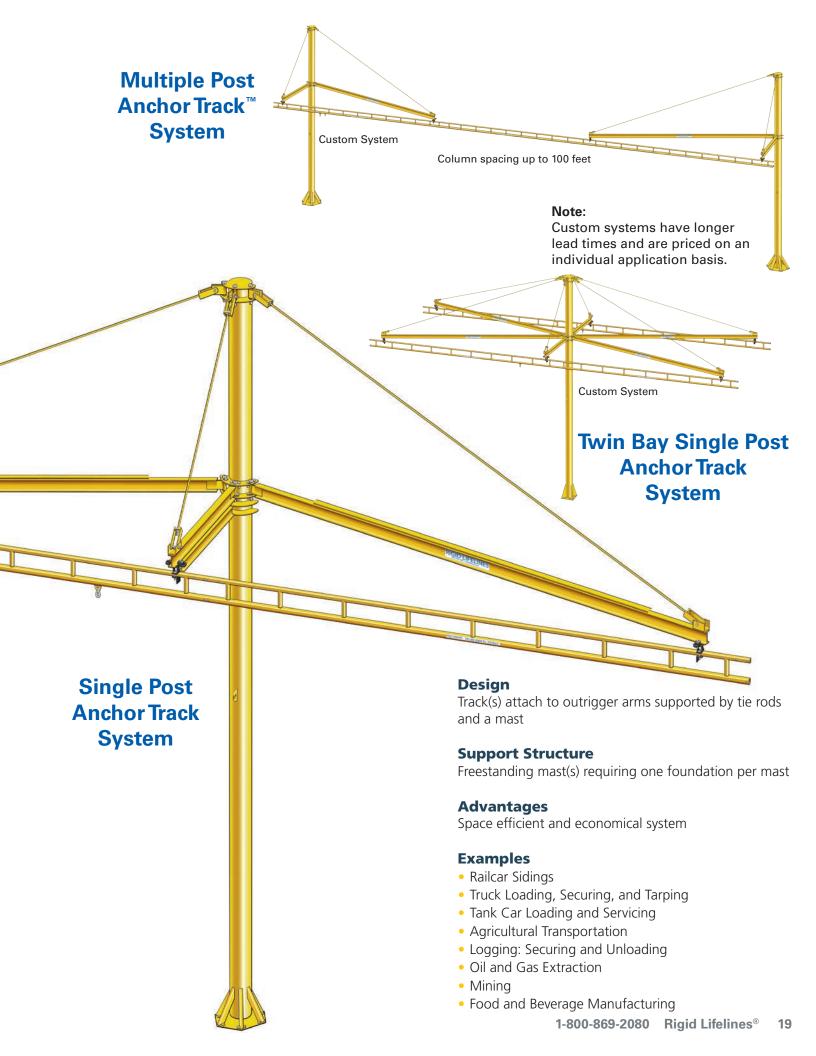
- Requires fewer foundations than other designs
- Track lengths start at 60 feet and are virtually unlimited
- Fall protection at virtually any height
- Up to 100 feet between supports



Application Options

- Can be engineered for single or twin bays (tracks on both sides of posts)
- Single, dual, or multiple tracks for one, two, or multiple workers





SWING ARMS

Compact System Minimizes Swing Fall Hazards

Rigid Lifelines® Swing Arm Anchor Track System

provides a circular or semi-circular fall protection coverage area, making it ideal for small to medium-sized work areas.

Both the Swing Arm and its trolley follow the worker, keeping the trolley positioned directly above the user at all times—minimizing swing fall hazards.

When not in use, the Swing Arm can be swung back out of the way for overhead cranes. Standard fall protection spans range from 5 to 30 feet with 180-degree or 360-degree arm pivoting.

Application Options

- Single, dual, or multiple tracks for one, two, or multiple workers (except for the two-person capacity Portable Base Swing Arm)
- Mobile design with counterweighted base is available
- Boom lock (Exception: A boom lock is required for Portable Base Swing Arm systems)

Design

Track(s) attaches to a swing arm that pivots between 180 and 360 degrees

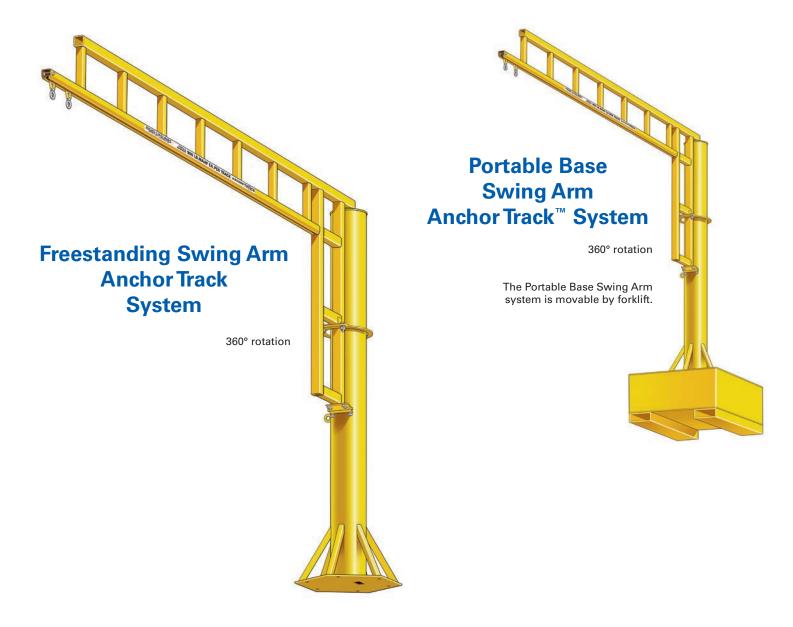


Coverage Area





180° coverage area





Support Structures

Swing Arm system is mounted either to:

- Existing wall columns, or
- Freestanding masts, either with a permanent base or a mobile, counterweighted base

Advantages

- Minimizes swing fall hazards by constantly positioning trolley over user's head
- Swings out of the way of overhead cranes
- Excellent for small to medium-sized work areas

Examples

- Utilities
- Water Transportation (e.g., water tankers)
- Food and Beverage Manufacturing
- Plastics and Rubber Manufacturing
- Primary Metals Manufacturing

ROLLING A-FRAME

Fall Protection Anywhere

Rigid Lifelines° Rolling A-Frame Anchor Track

System is the ultimate in mobility for fall protection systems. Simply roll the system into position and lock into place.

Our Rolling A-Frame system can eliminate the need for a permanently installed system, while providing coverage to virtually every location in your plant. This mobile system is also available as a custom engineered solution for your facility.



Coverage Area



Application Options

- Single, dual, or multiple tracks for one, two, or multiple workers
- Manual leveling jacks
- Foam-filled pneumatic casters (tires)
- Nylacron casters
- Power drives

Design

Track(s) attaches to a header supported by braces and legs equipped with casters

Support Structure

Caster-equipped legs and braces hold a header that the track attaches to

Advantages

Highly mobile fall protection coverage

Examples

- Aircraft Maintenance and Manufacturing
- Large Vehicle Maintenance and Manufacturing
- Oil and Gas Drilling and Extraction
- Mining and Excavating
- Utilities



Fixed-Height
Rolling A-Frame
Anchor Track™
System

Adjustable-Height Rolling A-Frame Anchor Track System



GRIFFINTM

Mobile Fall Protection for Many Locations

Rigid Lifelines[®] Griffin[™] Anchor Track System

provides rigid track fall protection with coverage of up to 30 degrees off-plumb. With typical overall weights of approximately 15,000 pounds, the entire system can be moved in minutes using a large forklift (Skidded system only).

Frequently used in exposed outdoor locations, our enclosed track design prevents dirt or ice build-up, so the trolley effortlessly follows users' movements as they traverse tops of vehicles and other large equipment.

- Standard track lengths from 20 to 60 feet
- Standard arm reach is between 8 and 12 feet
- Trolley-hook height starts at 22 feet

Wheeled Griffin comes with:

- Non-pneumatic tires
- Steerable rolling chassis
- Drawbar Eye Coupler (for Pintle hitch)
- Bubble levels, leveling jacks, bottle jack, and bottle jack plate for system leveling

Application Options

 Single, dual, or multiple tracks for use by one, two, or multiple workers

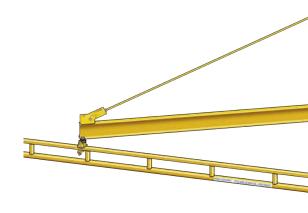
Wheeled Griffin options:

- Custom sizes and configurations available
- Dual steer with two tow bars, one on each end of the system

Design

Track(s) attaches to outrigger arms supported by tie rods, cross braces, masts, and counterweights





Support Structures

Track(s) is held by outrigger arms from two support columns attached to one of the following bases:

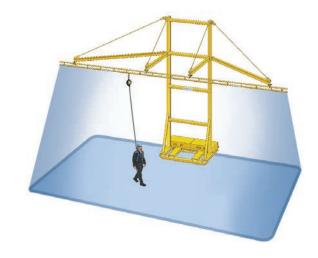
- Standard skid-mounted base, or
- Optional steerable wheeled chassis base

Advantages

- Excellent for temporary applications, indoors or outdoors
- Fully assembled system can be lifted with large forklift or, with the proper options, rolled or towed

Examples

- Trucks: Loading, Securing, and Tarping
- Manufacturing and Maintenance of Large Vehicles and Equipment





CUSTOM SYSTEMS

We Welcome One-of-a Kind Systems

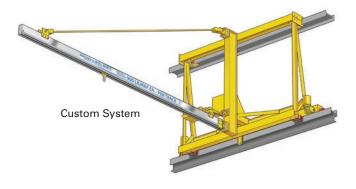
There's a simple way to test a manufacturer's willingness to do customized systems: How long do they take to return your calls?

At Rigid Lifelines®, we are truly eager to design customized systems, and our fast response times prove it. We have a full, talented team of engineers that love a challenge. Plus, unique challenges force us to design innovative, ergonomic solutions that can be incorporated into our standardized systems.

Below are two examples of unique systems that our engineers have developed.

Wall Traveling Fall Protection System

Ideal for wide areas with very long spans, this system provides fall protection coverage that can quickly fold out of the way of overhead cranes. This system attaches to your facility's existing support columns, allowing it to span the entire length of your building and cover multiple work areas.



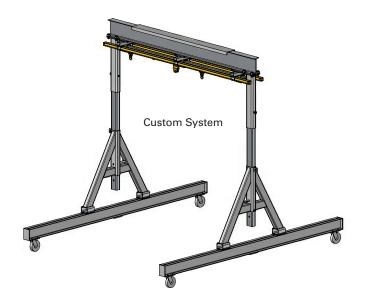
Note:

Custom systems have longer lead times and are priced on an individual application basis.



Fall Arrest and Material Handling System

Ideal for crowed indoor applications, this aluminum system provides mobile fall protection coverage that can be moved by hand. This system offers multiple fall arrest tracks on the outside and material handling track in the middle, making it perfect for almost any dual-application scenario.

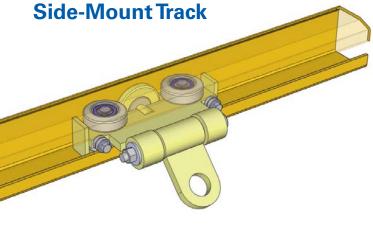


Custom Track Configurations

Side-Mount Track

Does your application require fall restraint, but traditional guardrail systems get in the way of your workers? If so, our side-mount track might be the perfect fall restraint solution.

By using a special trolley, our side-mount track can keep workers from a leading edge or dangerous equipment. Our enclosed, rigid design ensures smooth trolley travel while keeping dust and debris out. Our side-mount track can be bolted, welded, or anchored to existing structures. Contact us today to see if our side-mount track is the right fall restraint system for your specific application.



Curved Track

At Rigid Lifelines®, we understand that each application is unique and presents its own challenges. For this reason, all of our Anchor Track Systems can be completely customized.

Curved track is an example of a common customization. Available in plain or trussed track, our curved track comes standard at 45, 80, or 90-degree curves. However, our curved track can be curved to almost any required degree. Perfect for the transportation industry or for tight workspaces, curved track might be just what you need to maximize your specific workspace.

Curved Plain Track



WHY RIGID

Consistently Meeting Requirements

Our engineers have designed thousands of fall protection systems for clients across North America. People choose our fall protection systems because they meet or exceed OSHA and ANSI Z359 requirements while improving worker safety and productivity. No matter where you work or what task you may need to perform at height, we aim to provide a fall protection system that meets your needs.

Experienced and Informed Team of Engineers

Our engineers serve on the ASSE/ANSI Z359 Fall Protection Code Writing Committee, ANSI sub-committees, and the Safety & Health Technology Committee of the Association for Iron & Steel Technology. By participating with these organizations, our engineers are able to keep a pulse on the latest changes in fall protection requirements and technology.



LIFELINES[®]?

Bi-Coastal Manufacturing

We have manufacturing locations in Las Vegas, Nevada, and Morgantown, Pennsylvania. These two locations make it easier for us to serve customers everywhere between the east and west coasts.

Certified Manufacturing

Our welders are certified by the American Welding Society in steel (D1.1) and aluminum (D1.2) to ensure that every product we manufacture maintains quality. Our manufacturing engineers also ensure that ISO 9001:2008 procedures are adhered to as part of a quality management system for superior process improvement.

LAWS AND CODES

Fall Protection Standards (ANSI and OSHA)

Fall protection regulations make a distinction between whether you're in General Industry or the Construction Industry. This overview first discusses what is common to both industries.

The most important Fall Protection Code is ANSI Z359.2 "Minimum Requirements for a Comprehensive Managed Fall Protection Program." The ANSI fall protection standard Z359.2-2007 clearly defines all the duties and responsibilities that OSHA will require from an organization using fall protection. Furthermore, ANSI Z359.2 clearly defines issues that are generally not fully defined within OSHA law, such as hazard analysis, rescue plans, and anchorage requirements for fall restraint systems and work positioning systems.

Systems thought to originally be OSHA compliant may not be, specifically if the OSHA inspector uses the "General Duty Clause" to cite the more detailed ANSI Z359.2 Code.

A great starting reference for fall protection is the definitions section of Z359, available for free at: **ASSE.org** (search for "Z359.0").

General Industry—Fall Protection Codes

The most important standard for the safety of your general industry employees is ANSI Z359.2; the most important standard for federal law compliance is OSHA 1910.66 App C.

- ANSI Fall Protection Code Z359 (Nationally Recognized Safety Standard) is available for a nominal fee: search at **ANSI.org**.
- OSHA Fall Protection Code 1910.66 App C (Federal Law) is available for free: search at OSHA.gov.

Construction Industry—Fall Protection Codes

The most important standard for the safety of your construction employees is ANSI Z359.2; the most important standard from a federal law compliance perspective is OSHA 1926. The construction industry-specific fall protection code is ANSI A10.32.

- ANSI Z359 Fall Protection Code (Nationally Recognized Safety Standard)
- ANSI A10.32 Construction Fall Protection. Both ANSI standards are available for a nominal fee: search at **ANSI.org**.
- OSHA 1926 Subpart M App C (Federal Law), available for free: search at OSHA.gov.

For a comprehensive list of ANSI and OSHA Fall Protection related standards, visit our **Regulations and Standards** webpage at **RigidLifelines.com**





HOW TO BUY

Qualified Representatives throughout North America

Rigid Lifelines[®] is driven by passion for providing our customers with quality, user-friendly solutions to keep workers safe and more productive at elevation.

To find your representative, visit the **Where to Buy** webpage at **RigidLifelines.com**.

Or Give Us a Call:

USA/Canada: 1-800-869-2080

Local: **610-286-7200** Mexico: **1-610-286-2080**









