

# ***SOLVE FOR X.***

## ***Safety and Security at Your Loading Dock: Know Your Risks and Take Control***

Presented by:

**Walt Swietlik**

**Director, Customer Relations and  
Sales Support**



# SOLVE FOR X.

## Who is Rite-Hite?



*improving industrial safety, security and productivity worldwide*  
**THROUGH QUALITY AND INNOVATION**

# SOLVE FOR X.

## What makes the loading dock so dangerous?

- » Every 3 days someone is killed in a forklift related accident.
- » An additional 94,750 forklift related injuries are reported each year.
- » \$135,000,000 in immediate costs are incurred due to forklift accidents.
- » Workplace injuries and deaths costs the U.S. economy nearly \$200 billion annually.
- » 70% of all reported accidents could have been avoided with proper safety precautions.



\*nist.gov, "Performance Metrics for Intelligence Systems Workshop" 2009

# SOLVE FOR X.

## How does SAFETY come into play?

- » Prevent Trailer Separation Accidents
- » Protect Against Falls from the Loading Dock
- » Improve Pedestrian Safety
- » Reduce Whole Body Vibration
- » Implement a Safe Sequence of Operations



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## Help Prevent Trailer Separation Accidents

- » Early departure
- » Trailer creep
- » Landing gear collapse
- » Trailer pop-up
- » Trailer upending



## Help Prevent Trailer Separation Accidents

Secure a wide variety of trailers with a versatile vehicle restraint.

Intermodal shipping is growing faster than any other mode of transportation:

- » Intermodal shipments are projected to increase at twice the rate of truck movements over the next decade
- » U.S. exports reached \$2.3 trillion in 2013 – up nearly \$700 billion since 2009

Other considerations:

- » Refrigerated trailers on back hauls
- » Growing popularity of hydraulic tailgates on trucks and trailers



Over the road trailer



Liftgate trailers



Intermodal container chassis

## Help Prevent Trailer Separation Accidents

### VEHICLE RESTRAINT



### STABILIZATION

### TRAILER SEPARATION ACCIDENTS

### MAJOR TRAILER TYPES

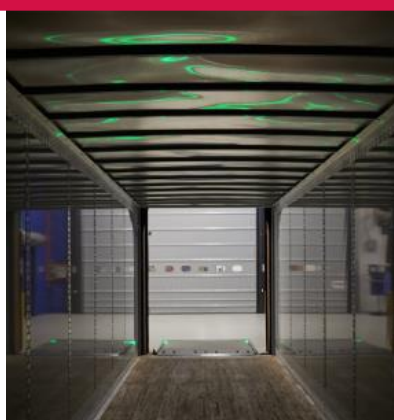
Trailer Stabilization	Early Departure	Trailer Creep	Landing Gear Collapse	Trailer Pop-Up	Trailer Upending	Intermodal Chassis	Over-the-Road Trailers	Lift Gate Trailers
X	X	X	X	X	X	X	X	N/A
N/A	X	X	X	X	X	X	X	N/A
N/A	X	X	TRAILER STAND	N/A	TRAILER STAND	X	X	N/A
N/A	X	X	TRAILER STAND	N/A	TRAILER STAND	X	X	X

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## Help Prevent Trailer Separation Accidents

Provide instant status-at-a-glance communication that conveys restraint status to:

- » Forklift drivers inside the facility
- » Truck drivers in the drive approach outside the facility



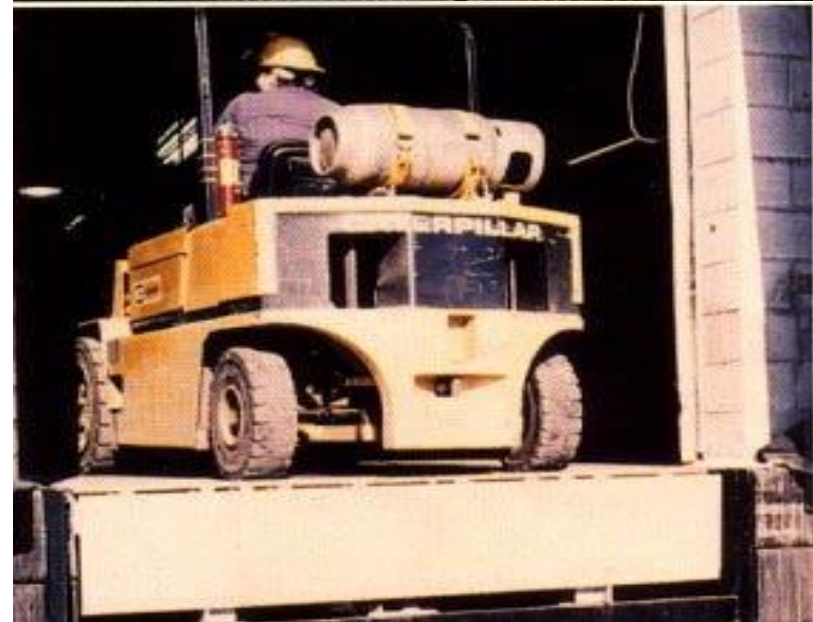
## Protect Against Falls from the Loading Dock

7% of forklift accidents occur when a lift truck is driven off a loading dock.



OSHA guide 1910.23 Guarding floor and wall openings and holes

- » (a) Protection for floor openings. (1) Every stairway floor opening shall be guarded by a standard railing...
- » (10)(b) Protection for wall openings and holes
- » (1) Every wall opening from which there is a drop of more than 4' shall be guarded by one of the following:
  - » (i) Rail, roller, picket fence, half door, or equivalent barrier...



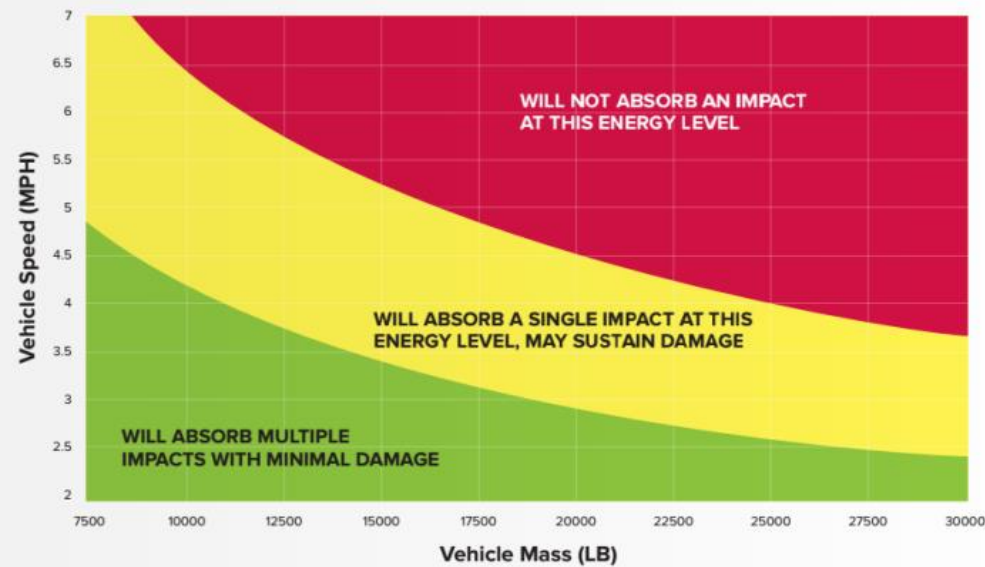
# SOLVE FOR X.

## Protect Against Falls from the Loading Dock

Protect your people and equipment from vacant loading dock drop-off, wall openings and material handling traffic with a variety of visual and physical barriers.



Energy of Impact



# SOLVE FOR X.

## Increase Pedestrian Safety

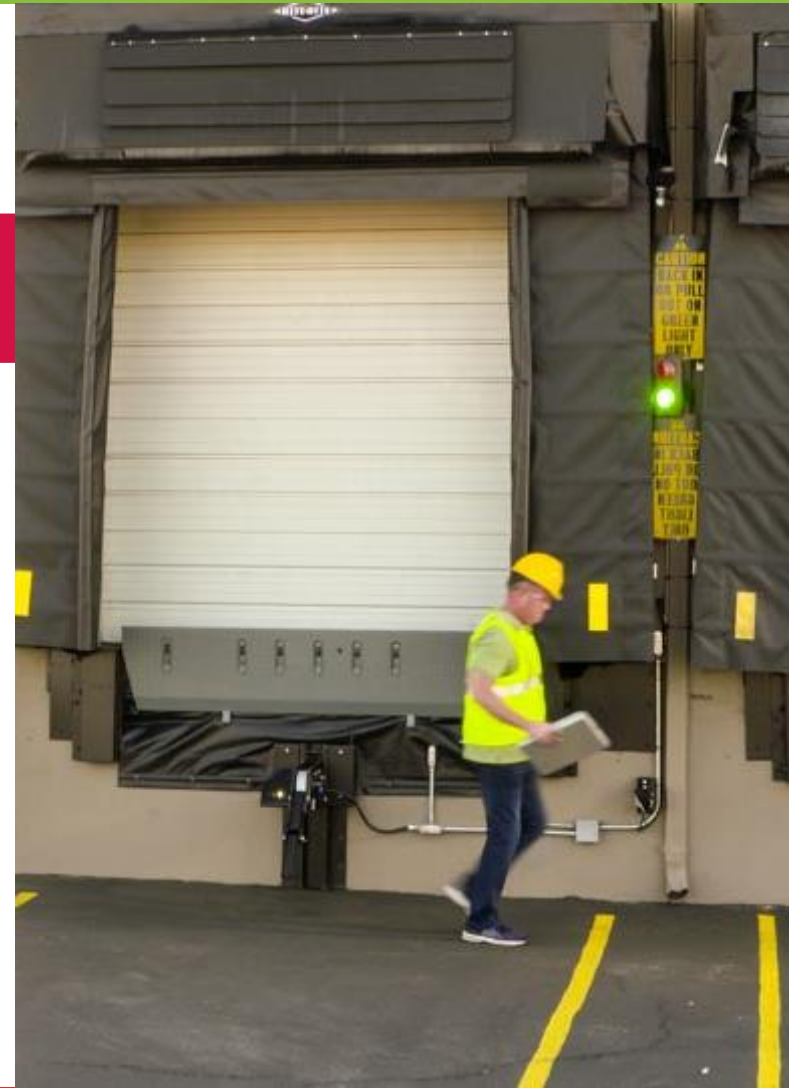
Protect your employees and your business from becoming a devastating headline.

### Worker seriously injured on loading dock in Mentor

*By News-Herald staff*

POSTED: 11/20/12, 12:01 AM EST | UPDATED: ON 11/20/2012

A man is in serious condition after being pinned between a vehicle and a loading dock early Sunday morning.



# SOLVE FOR X.

## Increase Pedestrian Safety

Protect your employees and your business from becoming a devastating headline.

### Man pinned against DeWitt loading dock dies

POSTED: 01/22/16, 9:39 AM EST

UPDATED: 2 WEEKS, 3 DAYS AGO

0 COMMENTS

DEWITT, N.Y. (AP) >> Authorities are investigating an accident involving a 57-year-old man who died after being pinned against a loading dock at a tile business in suburban Syracuse.

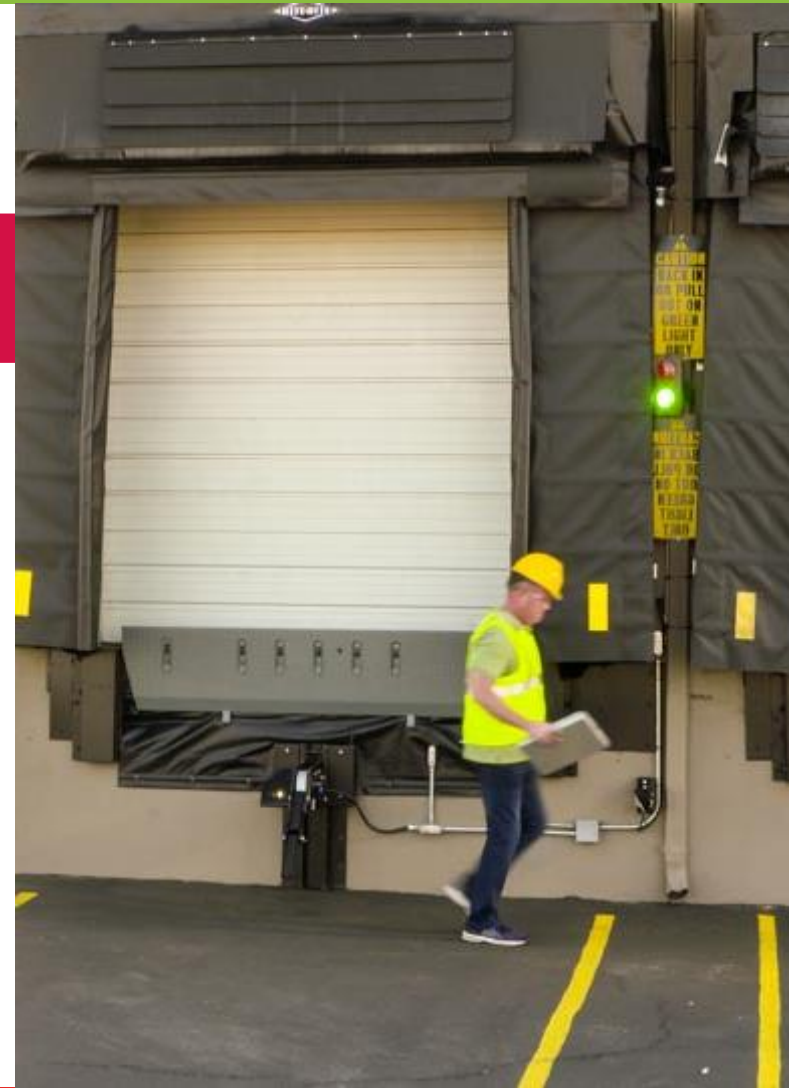
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0 COMMENTS

W  
do  
DEWITT, N.Y. (AP) — Authorities are investigating an accident involving a 37-year-old man who died after be

### Union City man killed by big-rig backing up to loading dock in Hayward

By Natalie Neysa Alund | Bay Area News Group

POSTED: 01/08/2013 11:04:39 AM PST | UPDATED: 3 YEARS AGO

0 COMMENTS

HAYWARD — An industrial worker was struck and killed Tuesday morning by a big rig backing up to a loading dock, police said.



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<http://www.oshasafetymanagement.com/blog/forklift-safety-infographic/>

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## Increase Pedestrian Safety

Protect your employees and your business from becoming a devastating headline.

### Man crushed to death at PTC Alliance

The victim was pinned between a truck and a wall at a loading dock.



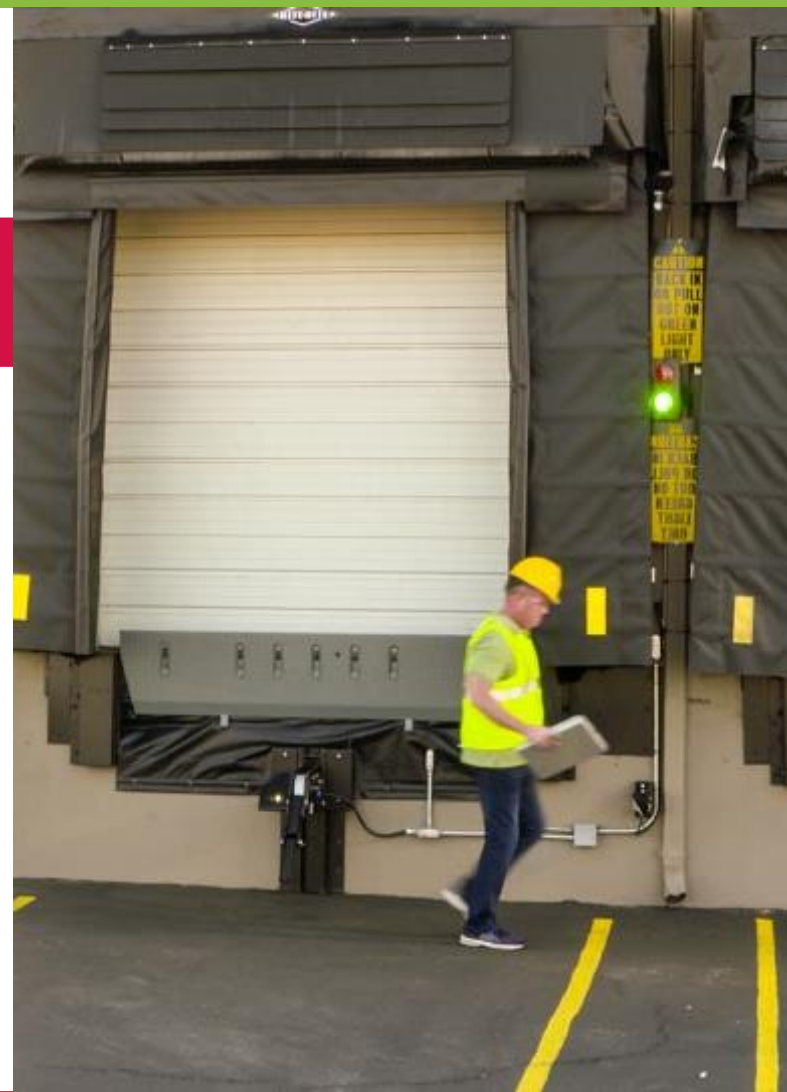
By **Malcolm Hall**  
Repository staff writer

Posted Jun. 16, 2016 at 10:14 AM  
Updated Jun 16, 2016 at 5:54 PM

**ALLIANCE** A truck driver was crushed to death early Thursday morning when he was pinned between a truck and a wall at a city business, a coroner's investigator said.

backing up to a loading dock, police said.

A man is in serious condition after being pinned between a vehicle and a loading dock early Sunday morning.



# SOLVE FOR X.

## Increase Pedestrian Safety

Protect your employees and your business from becoming a devastating headline.

### Worker Killed By Truck, Company Fined \$100,000

July 6, 2016 5:05 P.M. | Ministry of Labour

**Man crushed by truck**  
**Alliance**

The victim was pinned



By Malcolm Hall  
Repository staff writer

Posted Jun. 16, 2016 at 10:14 AM

Updated Jun 16, 2016 at 5:54 PM

**ALLIANCE** A truck driver was crushed to death early Thursday morning when he was pinned between a truck and a wall at a city business, a coroner's investigator said.

BRAMPTON, ON - Dream Party Decor of Mississauga pleaded guilty and has been fined \$100,000 for the death of a temporary worker struck by a truck at a loading dock.

On March 22, 2014 the company, which is in the business of setting up decorations and amenities at rental halls, had a temporary worker helping unload a truck at the loading dock of the company facility at 1415 Bonhill Road.

The truck driver did not have a clear and unobstructed view behind the truck towards the loading dock and there was no signal person present. The truck reversed, struck the worker and pinned the worker between the truck and the loading dock edge. The worker suffered fatal injuries as a result of being struck.

ig rig



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<http://www.oshasafetymanagement.com/blog/forklift-safety-infographic/>

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## Increase Pedestrian Safety

Protect your employees and your business from becoming a devastating headline.

### Man dies after being pinned by semi-trailer at loading dock

Monday, September 14, 2015 6:09 p.m. CDT



police lights

d \$100,000

s been fined \$100,000

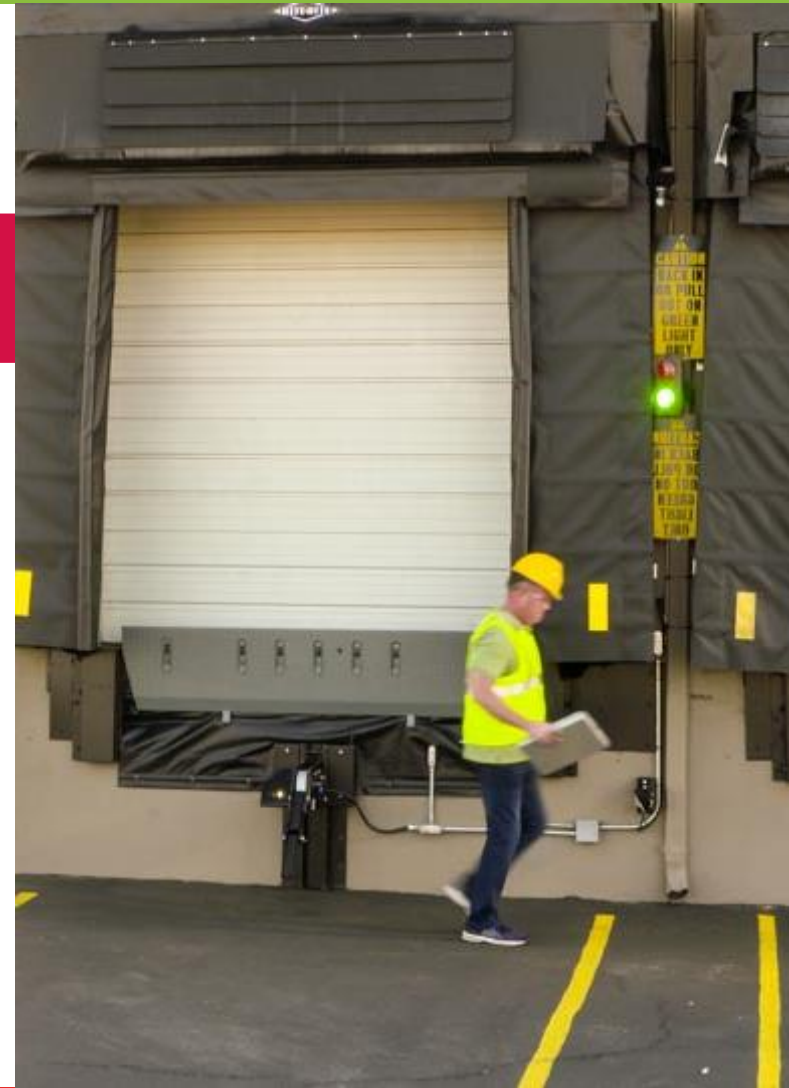
orations and amenities  
g dock of the company

ck towards the loading  
e worker and pinned  
red fatal injuries as a

BUTTERFIELD, Minn. (AP) - A 55-year-old man is dead after authorities say he was pinned between a semi-trailer and a loading dock in southern Minnesota.

result of being struck.

between a truck and a wall at a city business, a coroner's investigator said.



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## Increase Pedestrian Safety

Protect your employees and your business from becoming a devastating headline.

### Man dies after being pinned by semi-trailer at loading dock

Monday, September 14, 2015 5:55 AM EDT



BUTTERFIELD, Minn. (AP) — A man was killed Tuesday in an accident between a semi-trailer and

### Tractor trailer driver killed in Eagle Carport warehouse accident

NEWS, TOP STORIES

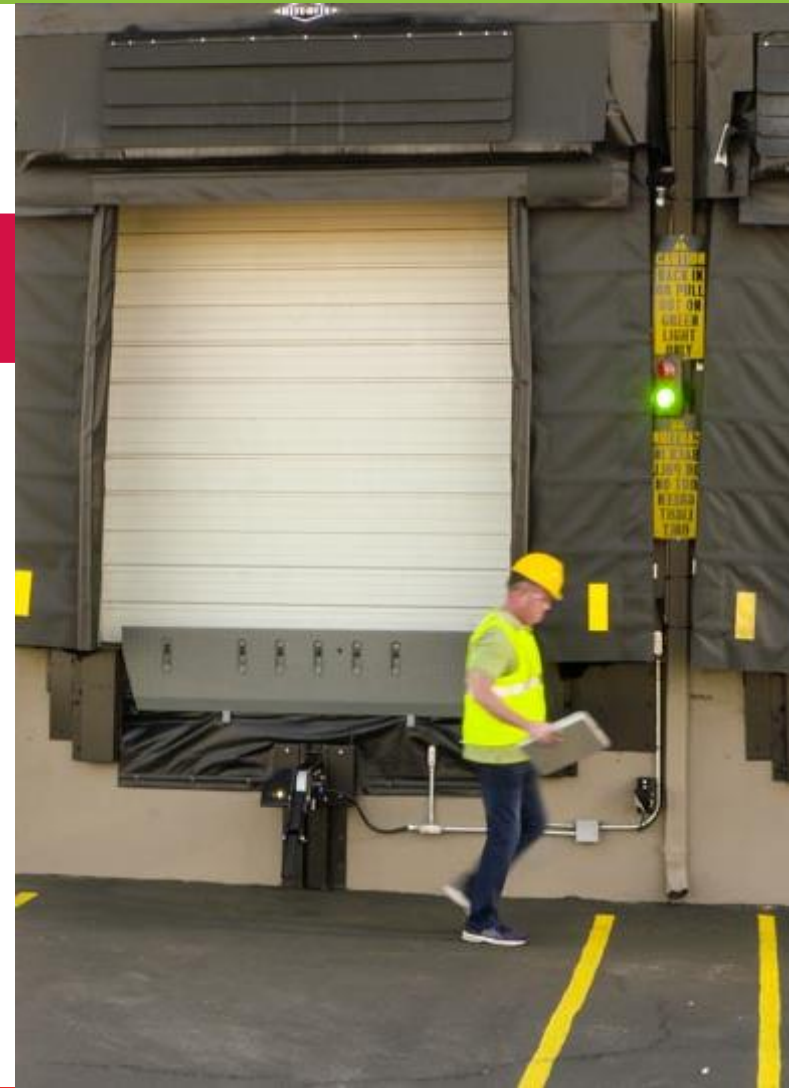
#### Alabama man pinned while loading truck

By Terri Flagg - tflagg@civitasmedia.com



An Alabama man was killed Tuesday in an accident at an Eagles Carport Inc. warehouse on Arlington Street.

The tractor-trailer driven by Sean Nelson Sr., 40, a delivery contractor from Mobile, Alabama, was parked on an elevated loading dock when its brakes gave way, pinning the man, said John Shelton, director of emergency services in Surry County.

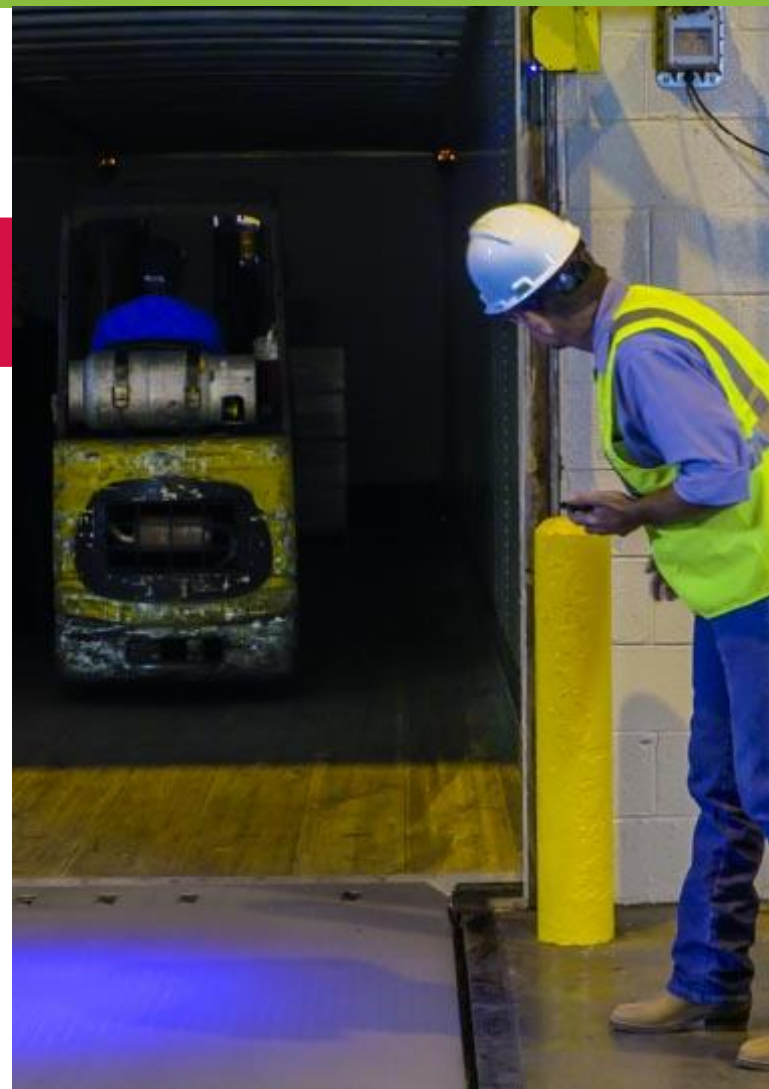
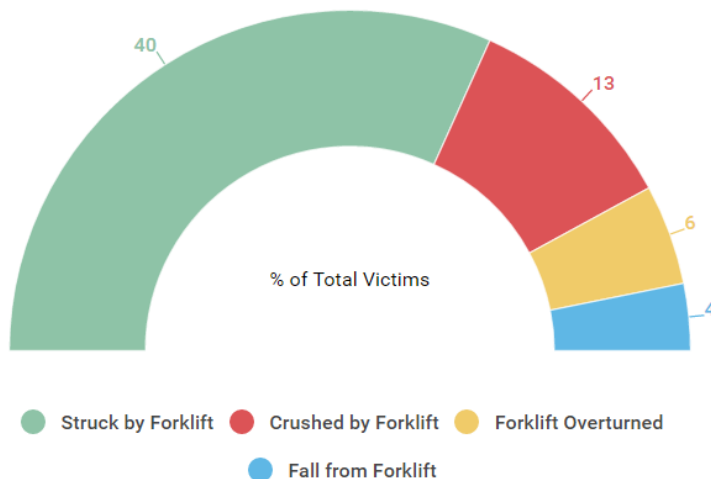


## Increase Pedestrian Safety

Of the 855,900 forklifts in the U.S... 96,785 were involved in a forklift accident that caused injury in FY 2015 – 1 in 10.

### Forklift Related Fatalities

% of Total Victims



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<http://www.oshasafetymanagement.com/blog/forklift-safety-infographic/>

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## Increase Pedestrian Safety

Protect your people and processes with:

- » Visual and audible communication in the drive approach
- » Trailer presence notification
- » Pedestrian-forklift collision protection inside at the dock



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## Increase Pedestrian Safety

The industry total number of vertical storing dock leveler units has increased 42% since 2007.

- » For added protection in vertical leveler applications a safety sensor is activated when a pedestrian is present in the pit.



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## Reduce Whole Body Vibration

Today, 21% of forklift drivers suffer from back or neck problems.

-Bureau of Labor Statistics

Reduce incidents of:

- » Chronic injury
- » Decreased productivity
- » Damaged product
- » Damaged equipment

Look for dock levelers with an ergonomic dock design that can reduce dock shock up to 50%



Smooth Transition Dock Leveler



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## Implement a Sequence of Operations

Build your control panel to meet your specific needs.

Maximize employee safety by interlocking multiple pieces of dock equipment for a customized sequence of operations.

- » Supply Chain Integrity Operation Sequence
- » Best Practice Operation Sequence
- » Door Protection Operation Sequence



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## How does SECURITY come into play?

- » Achieve Cleanliness and Environmental Control
- » Protect Against Cargo Theft



**YOU ARE  
BEING  
TARGETED.**

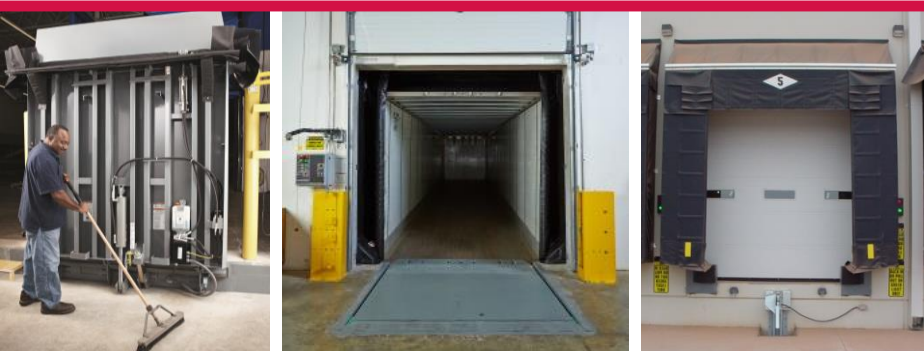
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## Achieve Cleanliness and Environmental Control

Federal regulations have created a heightened sense of product security to create a tamper proof, weather proof, contained cargo environment.

Maintain supply chain integrity at the loading dock by controlling dust & debris, insects & rodents and air exchange with:

- » Off-the-floor leveler mounting
- » A complete four-sided seal during loading and unloading
- » An overhead door that closes all the way to the pit floor



**FDA FOOD SAFETY  
MODERNIZATION ACT**

**Vertical Leveler  
Continuous Pit Application**

## Protect Against Cargo Theft

Thwart cargo thieves with a visual and physical theft deterrent system that can communicate with your building's security system.

- » \$30 billion lost to cargo theft each year<sup>1</sup>
- » In Q2 of 2016, nearly \$40 million worth of cargo was stolen in the USA<sup>2</sup>
- » \$682K loss value for facility thefts
- » 27% of all cargo thefts took place at distribution centers<sup>2</sup>
- » Stolen cargo can quickly lead to lost profits and a damaged reputation





**PROMAT** 2017  
McCormick Place | Chicago  
April 3-6, 2017  
[promatshow.com](http://promatshow.com)  
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## » Craft an Efficient Loading Dock Design

PAPER  
 DRY WAREHOUSING  
 FOOD PROCESSING  
 AUTOMOTIVE  
 3PL  
 COLD STORAGE  
 GENERAL CONTRACTOR  
 DISTRIBUTION  
 BEVERAGE  
 HEAVY MANUFACTURING



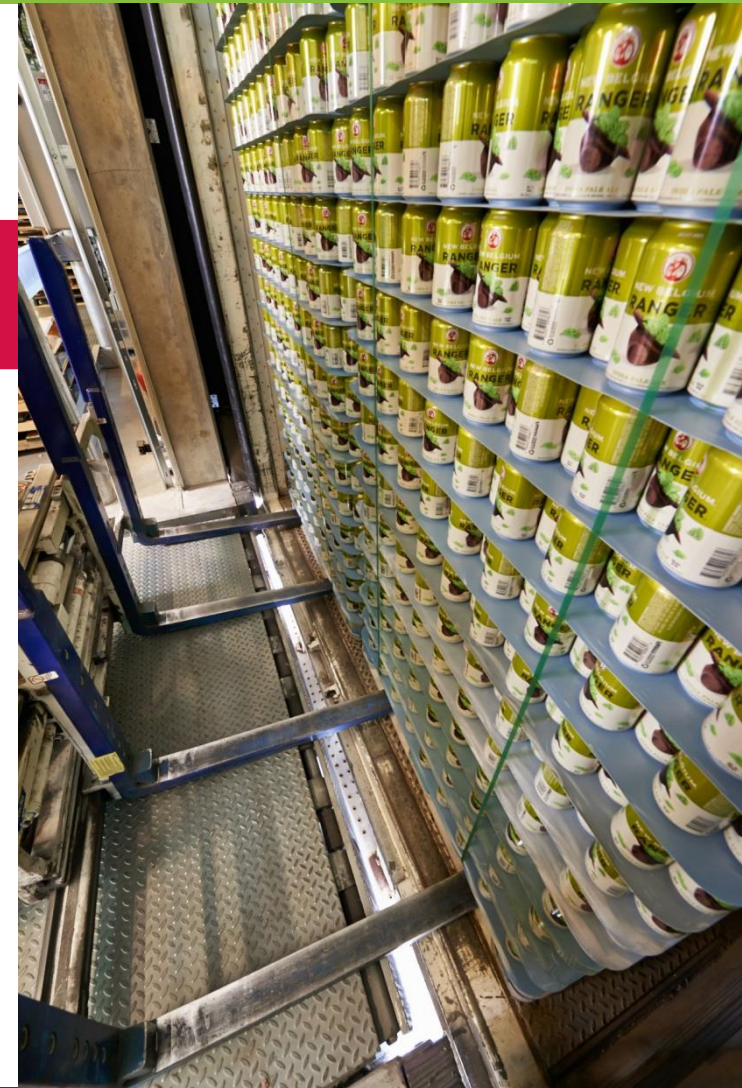
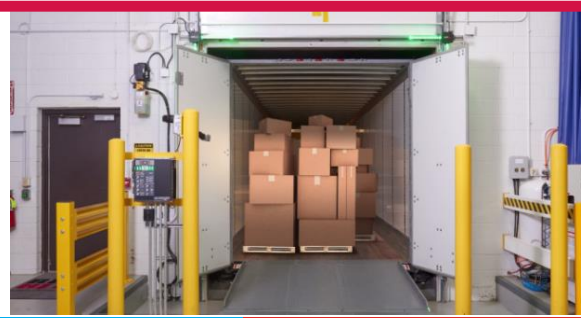
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## Efficient Loading Dock Design

Achieve the ultimate in loading dock safety, security, and productivity with industry specific loading dock design solutions.

Take into account important factors such as:

- » Type of facility
- » Variety of trailers serviced
- » Load classifications
- » Environmental requirements
- » Type of material handling equipment used



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## ***For More Information:***

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