

Workplace Safety & Compliance for Today's Safety Professional

Go for zero accidents with Brady Lockout/ Tagout solutions and minimize the consequences of a fall from height with suitable fall protection system.

Raluca Dina

ID Process

BRADY MISSION: WE IDENTIFY AND PROTECT PREMISES, PRODUCTS AND PEOPLE



- Brady is an American company established 101 years ago, listed at the NY Stock Exchange, having manufacturing and distribution facilities in 56 countries and over 6600 employees
- We are the only supplier to offer a complete range of proven products to help you to create a visual workplace. In a complex and ever-changing marketplace, we genuinely are the one-stop shop for the industry



FACILITY AND SAFETY ID :

- Signs
- Labels
- Lockout/Tagout Devices
- Pipe and Valve Tags
- Sorbents

WIRE ID:

- Labels and sleeves for wire identification applications in:
- Electrical / Datacom & Telecom / Aerospace / Defense...

ID SYSTEMS:

- Handheld Labelers and Supplies
- Bench-top Printers and Supplies
- Software

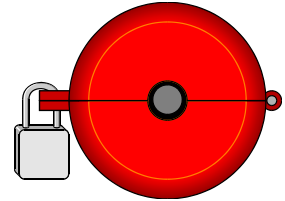
Lockout/Tagout?

What is Lockout/Tagout?

Lockout / Tagout is a planned safety procedure which involves turning off the energy supply of industrial machinery and equipment whilst maintenance work or repairs are being carried out. This procedure protects workers from the risks posed by live machinery or electricity.

LOCKOUT

Placing a lock on an energy isolating device so that it is physically impossible for anyone to operate the energy isolating device or the equipment being controlled until the lock is removed.



TAGOUT

Placing a tag on an energy isolating device to warn others that the energy isolating device and the equipment being controlled should not be operated.



LO/TO SAVES LIVES!

Frequency of LOTO Accidents

- **10%** of all industrial accidents are LOTO-related
- **250,000** LOTO-related accidents each year, resulting in approximately:
 - **200** fatalities
 - **60,000** injuries
- Lockout accidents also damage equipment, requiring repairs, replacement, downtime
- **Helps to:**
 - **Saves lives**
 - **Limit Corporate Liability**
 - **Lead to lower insurance premiums**
 - **Increase productivity & reduce equipment downtime**



The true cost of accidents

DIRECT COSTS

- ✓ Compensation payments
- ✓ Increased insurance premiums

INDIRECT COSTS

- Investigation costs and reporting
- Equipment damage and downtime
- Production disruption
- Lowered morale amongst workforce
- Bad public relations

The initial cost of an accident is only the tip of what it really costs you!

European Regulations

- The **EU Guidelines 89/655** specify the minimum requirements concerning Safety & Health while using equipment. Paragraph 2.14 lays down that “**every piece of equipment must be fitted with clearly visible devices with which it can be separated from every energy source**”.
- EN 1037 norm related to the equipment’s safety defines the measures regarding the energy isolation of machinery and the power dissipation to prevent hazardous equipment re-energising. It assures a safe & secure intervention within a risk-prone area.
- European directive **CEE 89/455** outline the minimum regulations for the safety & protection of employees when servicing industrial equipment.

Brady Lockout / Tagout Solutions

- Brady was the first to respond to the new OSHA legislation in the U.S. in 1990, and has maintained its position as a leading Lockout solutions provider ever since. Today, Brady offers a comprehensive package for Lockout/Tagout compliance.
- Complete Lockout tagout implementation is made by performing an audit, identification of energy points, selection and acquisition of adequate devices, elaboration of instructions and training

Why to implement a Lockout/Tagout program?

- To prevent mechanical & electrical risks
- Safer workplace while doing maintenance, cleaning or repairs
- Less downtime, higher productivity
- Best Safety Practice

Special Situations



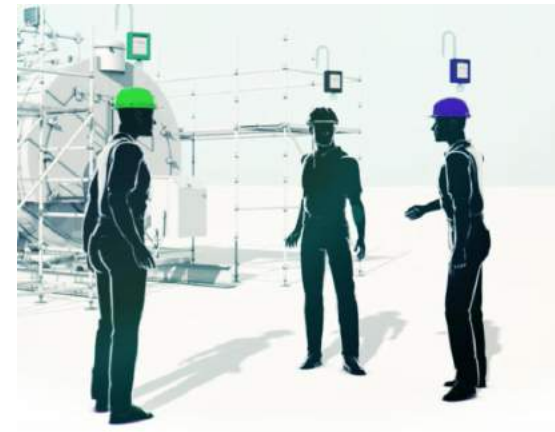
Group lockout
each employee must have “exclusive control”



Shift changes
ensure lockout continuity



Emergency lock removal
requires mgmt approval, document procedure



Working with outside contractors
must communicate and coordinate

Visual Workplace For Lockout Tagout

- Equipment
- Facility ID
- Switches
- Breakers
- Pipes
- Valves
- Tags
- Lockout Devices
- Padlocks

BRADY LOCKOUT TAGOUT PROCEDURE SAMPLE

Developed by: BRADY Reviewed by: BRADY Released by:

Description: Boiler #1 Equipment #: ISU 0012
Location: Boiler Room Proj: GHQ Rev: 3 Date: N/A Origin Date: 8/3/08

4 LOCKS & TAGS NEEDED

ANGER
Steam pressure and burn hazard. Ensure steam and heat have dissipated before proceeding.

NEXT AUDIT DUE: SEP 2009 SEP 2010 SEP 2011 SEP 2012

North Wall South Side View North West Side View

ALWAYS PERFORM A MACHINE STOP BEFORE LOCKING OUT DISCONNECTS

ID	Source	Location	Method	Check	Device
E-1	Electrical 480V	Disconnect located at the MCC located on North Wall	Move E-1 disconnect to off. Lock out.	Attempt restart at CP-1.	Lockout Hasp and Lock
W-1	Hot Water Supply	Disconnect Above the Boiler, Valves on West Side.	Turn W-1 valve off. Lock out.	Verify pressure has bled off.	Cable Lockout
W-2	Hot Water Return	Disconnect Above the Boiler, Valves on West Side.	Turn W-2 valve off. Lock out.	Verify pressure has bled off.	Cable Lockout
G-1	Gas Natural Gas	Disconnect on West side of Boiler unit.	Turn G-1 valve off. Lock out.	Verify pressure has bled off.	Universal Ball Valve Lockout

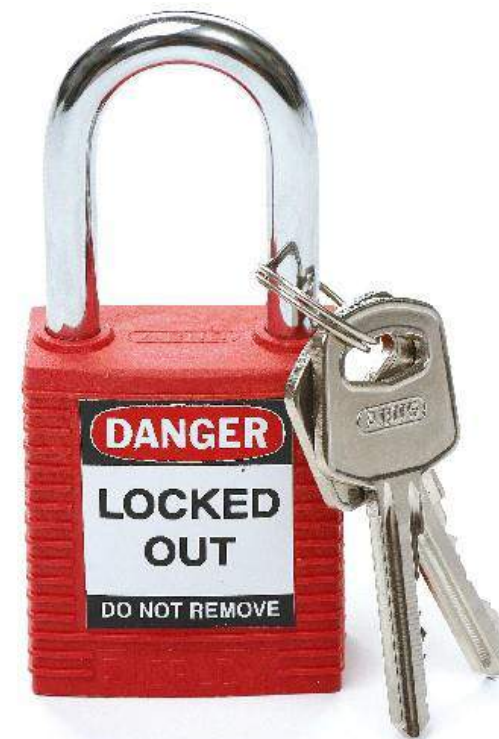
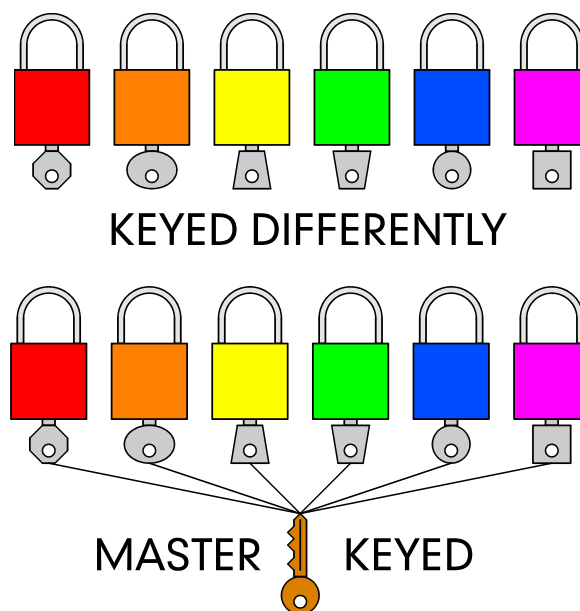
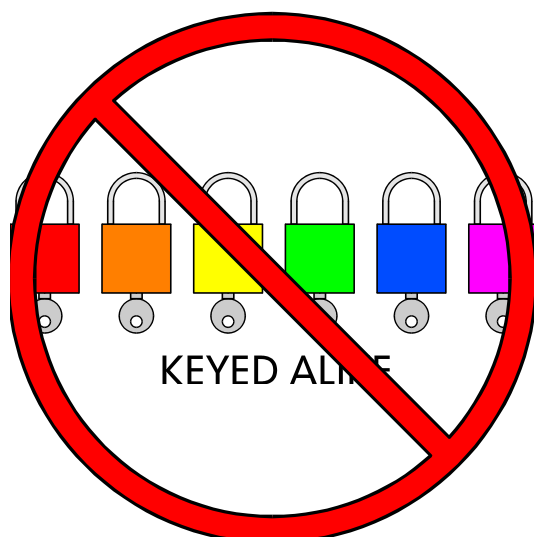
CP = CONTROL PANEL E = ELECTRICAL W = WATER P = PNEUMATIC C = CHEMICAL V = VALVE G = GAS S = STEAM

ANGER **OPENING A GUARD DOES NOT CONSTITUTE A LOCKOUT!** **ANGER**
Any machine modifications must be shown in procedure. Contact facilities to update procedure.

BRADY Safety Is Your Responsibility! 800-496-4040

Padlocks

- Employees must have **exclusive control** over their padlocks for lockout/tagout use
- Locks must be **standardized** and **distinguishable**
- Lock must identify the person using it.



Labeled Lockout Hasp:

- Combination Lockout Tag and Safety Lockout
- Constructed from tough anodized aluminum alloy
- Write-on label accepts pencil, pen and marker

Steel Lockout Hasps:

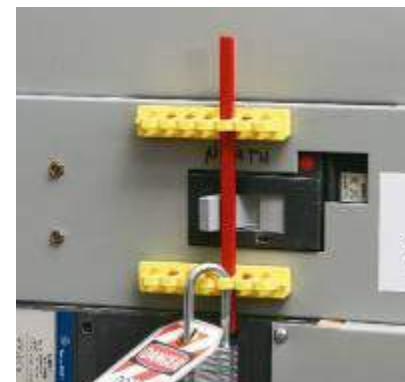
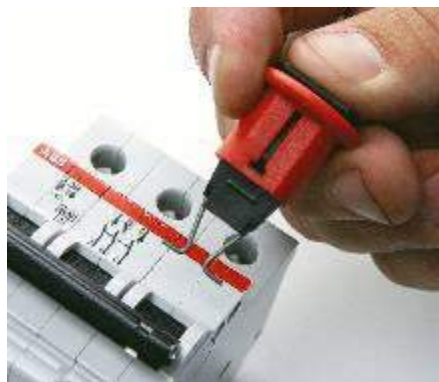
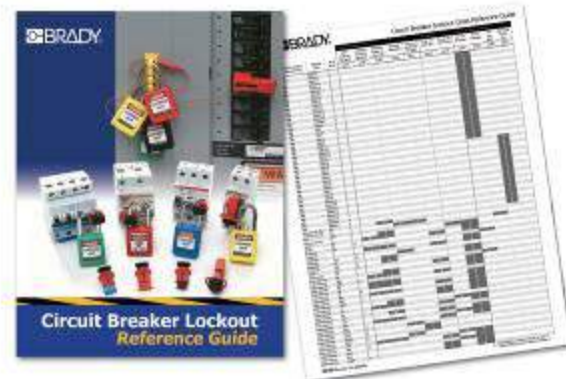
- Vinyl-coated high tensile steel with rust-resistant plating



Electrical Lockouts

Circuit Breaker Lockouts:

- Fit a wide range of breaker sizes
- Easy application – thumbwheel operation
- More secure – feature a serrated blade & foot
- The broadest line available
- Patented features
- Field tested; Helpful circuit breaker reference guide



Valve Lockouts

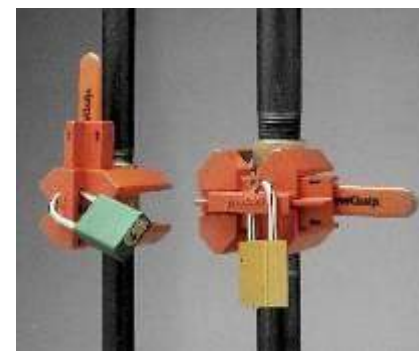
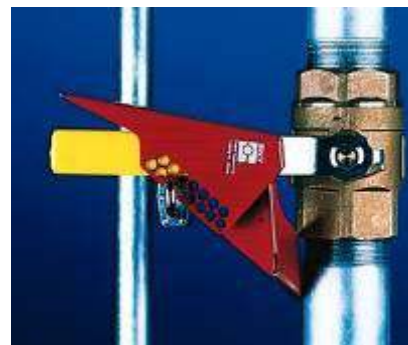
Gate Valve Lockouts:

- Distinct fit & universal versions
- Rugged construction
- Withstand chemicals and temperature extremes



Ball Valve Lockouts:

- Single piece triangular design – two sizes fit valves to 3" diameter
- Versatile 2-piece design – two sizes fit valves to 8"
- Patented designs; assured fit lockouts



Multi-Purpose Cable Lockouts:

- Great flexibility for use on gate valves, electrical disconnect switches, panels and more
- Push button self-winding mechanism on mini-cable lockout retracts into body; cinches cable tight



All Purpose Cable Lockout



Mini Cable Lockout



The Brady Advantage

Our products and solutions perform in ways that others simply can't match. Our people perform in ways that regularly exceed your expectations, and our focus and discipline work toward solid, long-term performance for our customers. In short, Brady is the company you trust when **performance matters most.**

Brady offers a comprehensive line of LO/TO devices and tools - Padlocks include safety, non-conductive, brass, Lockouts include, Valve, Universal and Circuit breakers, Tags, Labels, Lockout Boxes, Padlock Stations and much more!
Go for the original, copies can cause serious injuries! See below ex.



Remember... Lockout / Tagout Saves Lives



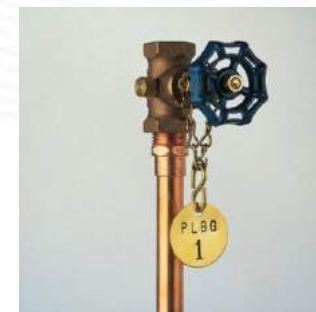
Safety signalisation



- What?
 - Safety signs
 - Hazardous signs
 - Transport signs
- Why?
 - Save lives
 - Be compliant to the local regulations
- How?
 - Preprinted signs from our factories
 - Do-It-Yourself solutions with Brady printers



Pipemarking



- What?
 - Pipemarkers
 - Color bands
 - Valve tags
- Why?
 - Save lives
 - Be compliant to the local regulations
- How?
 - Preprinted signs from our factories
 - Do-It-Yourself solutions with Brady printers

Logistic and area marking



- What?
 - Inspection labels
 - Floor marking tape
 - Numbers and letters
- Why?
 - Increase safety
 - Facilitate inspection and inventories

Spill control



- What?
 - Polypropylene sorbents
 - Eco-friendly sorbents
- Why?
 - Increase workplace safety
 - Save time and money when spills
- How?
 - Pillow, pads, socks, kits, etc
 - Universal, maintenance or oil-only sorbents



Tagging Solutions



Scafftag

Fall protection systems for industrial applications

Falls from height are the biggest cause of death and one of the biggest causes of serious injury in the workplace today. Specific legal measures continue to be introduced worldwide such as OSHA in the United States and the Temporary Working at Height Directive in Europe.

These measures include:

- Where fall protection is needed?
- Which systems are acceptable?
- Who is responsible?

What you need to do?

The official advice to duty-holders can be summarised as follows:

- Avoid work at height, where possible
- When working at height is essential, ensure that workers are not exposed to unnecessary risks
- Where it is not possible to eliminate the risk of falling, **use a suitable fall protection system to minimise the consequences of a fall**



Fall protection systems for industrial applications

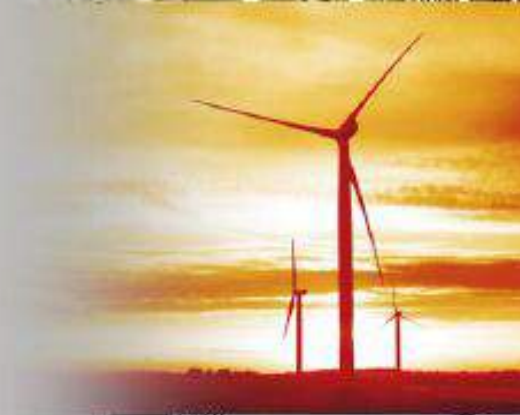
Why Latchways?

- We understand fall protection
- We meet and exceed all the required standards
- We use quality materials to ensure durability
- We assist in setting the direction for the industry



Latchways market sectors

- ManSafe® for Roofing
- ManSafe® for Industry
- ManSafe® for Utilities
- ManSafe® for Ladders
- ManSafe® for Telecoms
- ManSafe® for Windows
- ManSafe® for Aircraft



ManSafe® for Roofing

The Latchways Constant Force® post:

- Launched in 1998
- is a top fix pre-engineered system
- has a unique patented energy absorbing & load reducing mechanism
- is multi user/directional
- is accepted as industry leader
- is aesthetically pleasing

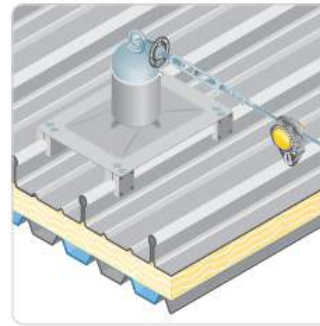


Fall protection systems for industrial applications

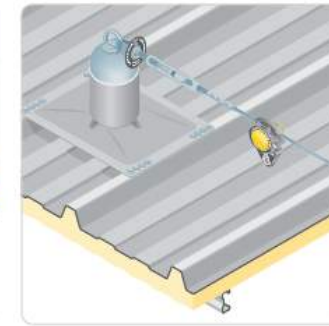
The Latchways Constant Force® post:

- Unrivalled performance
- 350+ full scale roofs tested
- 70 baseplate variations
- 500 roof types
- 1 million+ posts installed

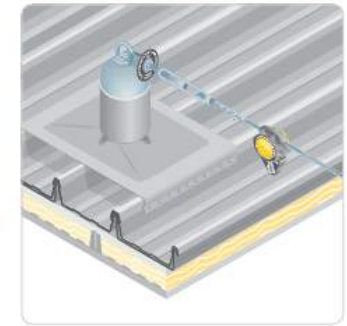
Constant Force post on standing-seam roofing



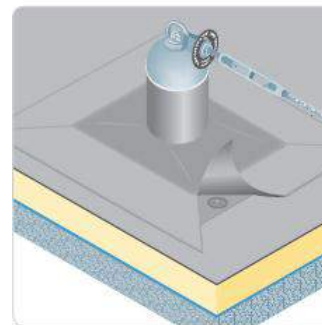
Constant Force post on composite/BUOS roofing



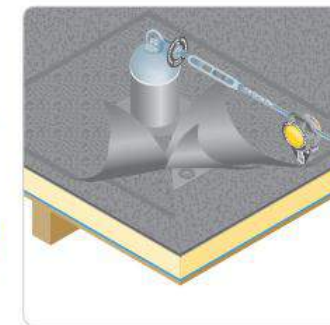
Constant Force post on secret-fix roofing



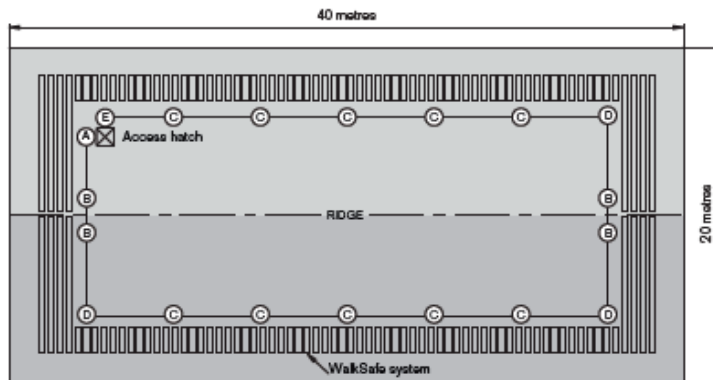
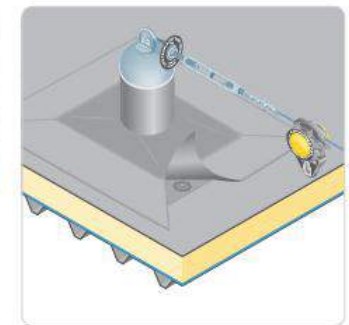
Constant Force post on concrete deck flat roofing



Constant Force post on timber deck flat roofing



Constant Force post on steel deck flat roofing



ManSafe® for Roofing

WalkSafe PVCu Walkway:

- BBA Certificated
- Standard & bespoke options
- Roofing system manufacturer approval
- Fire Safe
- Severe UV exposure tested
- Corrosion and moisture resistant
- Impact resistant
- Slip resistant
- Recyclable



ManSafe® for Roofing

VersiRail® Guardrail:

- Collective protection
- Aluminium construction
- Aesthetically pleasing
- Lightweight compared to steel
- Corrosion resistant
- Fixed and freestanding options
- Straight , curved & inclined uprights
- No need for annual inspection
- Tested and certified in accordance to EN 13374 and EN 14122-3



ManSafe® for Industry

- Suitable for virtually all industrial environments
- New build or retrofit
- Horizontal, overhead & vertical
- Easily accommodates change in direction



ManSafe® for Utilities

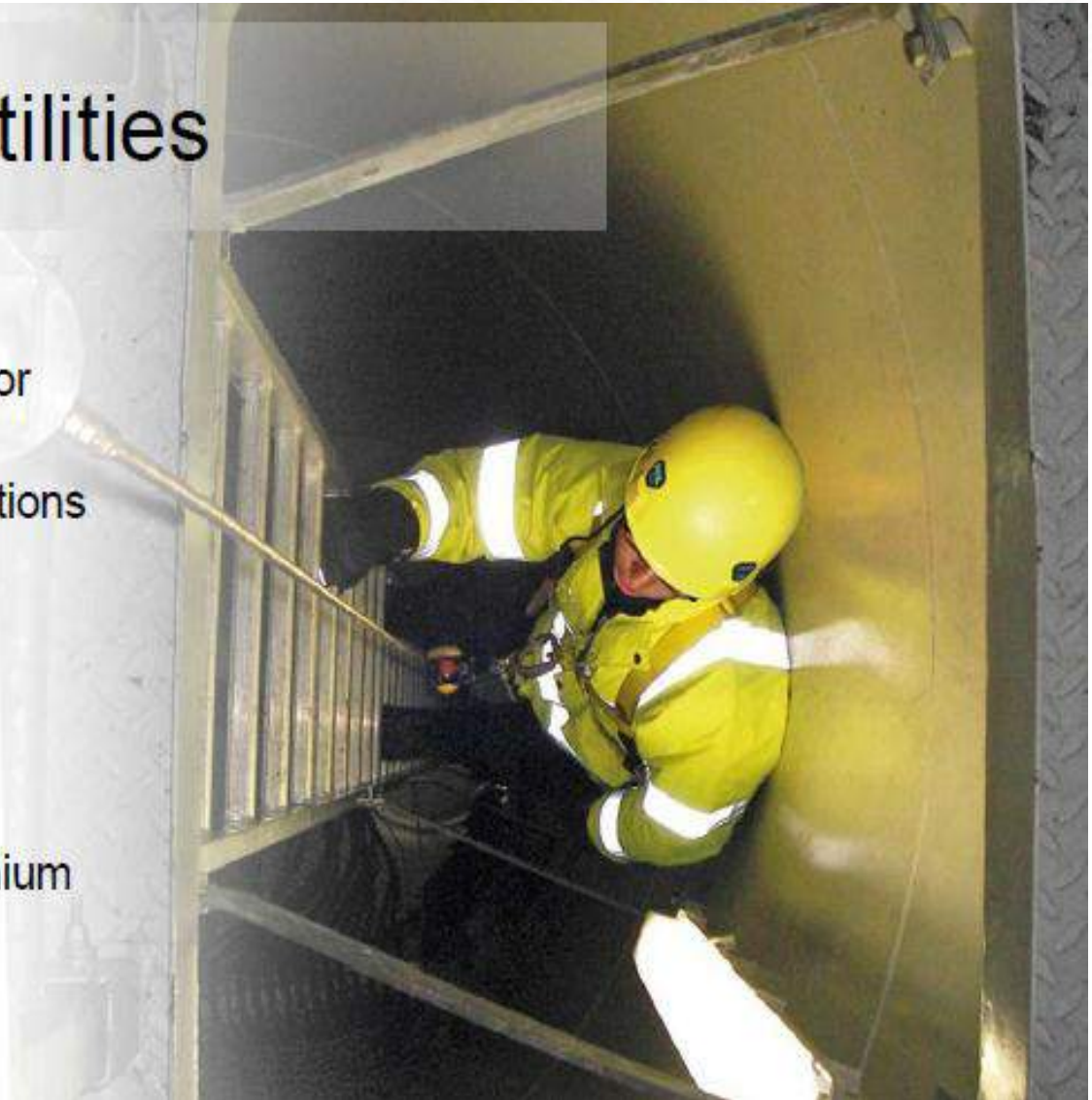
Electricity towers

- System flexibility
 - Vertical
 - Inclined
 - Horizontal
 - Bespoke bracketry
- 2000 tower type database
- Durability
 - Rain
 - Snow
 - Ice
- System of choice for global energy providers

ManSafe® for Utilities

Wind Turbines

- Standard specification by major turbine manufacturers
- Onshore and offshore applications
- Part of turbine lifecycle
 - Construction
 - Operation
 - Maintenance
 - Dismantle
- Suitable for lightweight aluminium ladder systems
- Independent shock absorber
- Hands free operation



ManSafe® for Telecoms

Monopoles, lattice towers & ladders

- Unobtrusive & lightweight
- New build & retrofit
- Installed to any structure
- Installed in virtually any environment
- Can be designed for up to four users
- Visible deployment indicator



ManSafe® for Aircraft

WinGrip®

- Approved and used by all major aircraft manufacturers
- Lightweight and portable
- Suitable for wet or dry surfaces
- Run on compressed air or nitrogen
- No electrical requirement
- Independently tested
- No metal on metal contact



Fall protection systems for industrial applications



- Latchways has combined innovative engineering, superior materials and futuristic design with quick and easy maintenance to provide the most advanced range of Self Retracting Lifelines (SRL) on the market.
- The range is designed for use with the ManSafe overhead single and multi-span systems providing the complete solution for overhead industrial fall protection.
- The ManSafe Sealed SRLs have been specifically designed for use in harsh marine environments such as on offshore wind turbines and oil rigs. Their inherent flexibility means the device can be installed on even the most complex structure for unhindered hands-free fall protection.

ManSafe® SRL

Self retracting lifelines

- Completely field serviceable
- Impact resistant casing
- Patented frictionless braking system
- 100% Full Contact™ locking mechanism
- Locking mechanism and absorber are completely impenetrable



The Latchways PRD

- Total self-rescue in less than 30 seconds
- Integral part of your harness
- “Real” rescue plan
- Minimal, simple training
- Zero maintenance – Annual visual inspection
- Low cost of ownership
- Descent height: 20 m (65ft)
- Descent speed: 1 m per second
- Total user weight: 59 kg min – 140 kg max (130 lbs – 310 lbs)



Standards

Harness:

- EN361: 2002
- ANSI Z359.1:2007

Descender device:

- EN 341: 2011 Type 1, Class D
- ANSI Z359.4:2007

'Backpack' and Harness:

- BS EN 13463-1:2001 equipment group 11 category 2



Never compromise on safety

- Excellence in engineering
- Innovative products
- Patentable technology
- Superior performance
- Better materials
- Exceed the Standards
- Registered & trained Installers
- Ensure worker safety at height.



Questions?

