Falls:
The Responsibility of Management or Worker?

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NSC Orlando

21 September 2005

Historically Management _and_ Workers both have acted as if Fall Safety was a 50%-50% responsibility.

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Historically Management and Workers both have acted as if Fall Safety was a

50%-50% responsibility

Unfortunately, following an incident each side plays the blame game, for not upholding their 50% of the responsibility.

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Fall Protection:
Responsibility of Management

AND

Worker

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Shared Responsibility

- ~~50%~~ 100%   Employer

- ~~50%~~ 100%   Employee

- Management must provide 100% **first**
- Then workers can live up to their 100%

100% Management first

- Recognition of hazards
- Fall safety planning
- Proper equipment and systems
- Engineered Anchorage points
- Written procedures
- Competent Person training

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100% Management first

- Recognition of hazards
- Fall safety planning
- Proper equipment and systems
- Engineered Anchorage points
- Written procedures
- Competent Person training

Does management have the skills and commitment?

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Hazard Recognition

- What is an obvious hazard?

- What benefit is training?

- What are short cuts in work procedures?

- What acceptable risks?

- What are special conditions?

What is Best Practice?

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What is a Hazard?

"Hazards are conditions, set of circumstances or inherent property that can cause injury, illness or death.

Hazard Risk is an estimate of the combination of the occurrence likelihood and severity of injury etc. expected."

ASSE Dictionary of Terms 2001

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Occupational Fatal Injuries 2004
ref BLS 9 13 05

	1991-95 Average	1996	1997-99 Average	2002	2003	2004
OSHA total	…………	6,280 av 94-97	…….	5524	5575	5703
Falls total Lower level	562	610	693	719 638	696 604	815 732*
- Ladders	87	97	107	126	114	133
- Roofs	130	149	155	143	128	178
- Scaffolds	79	88	92	87	85	89
Falls to Same Level	56	52	57	81	92	83

*54% construction

4.1 deaths per 100,000

Can workers be expected to recognize exposure to hazards such as:

- holes
- edges
- ladders
- scaffolds
- roofs

What is the worker level of awareness of the risk?

ANSI Z10 Occupational Health and Safety Mgmt Systems

"The primary purpose of this standard is to provide a management tool to reduce the risk of occupational injuries, illnesses and fatalities."

Also:

- *Australian Code of Practice for the Prevention of Falls (Nov 05)*

- *ANSI Z359.1 revision due 2006*

new management section

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ANSI Z10

- 1.0 Scope
- 2.0 Definitions
- 3.0 Management Leadership & Employee Participation
- 4.0 Planning (before workers are on site)
- 5.0 Implementation and Operation
- 6.0 Evaluation and Corrective Action
- 7.0 Management Review

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Hazard control

What is adequate and what is not?

Human Factors

- Can you see in time to react

Then ….

ARMED

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Then …

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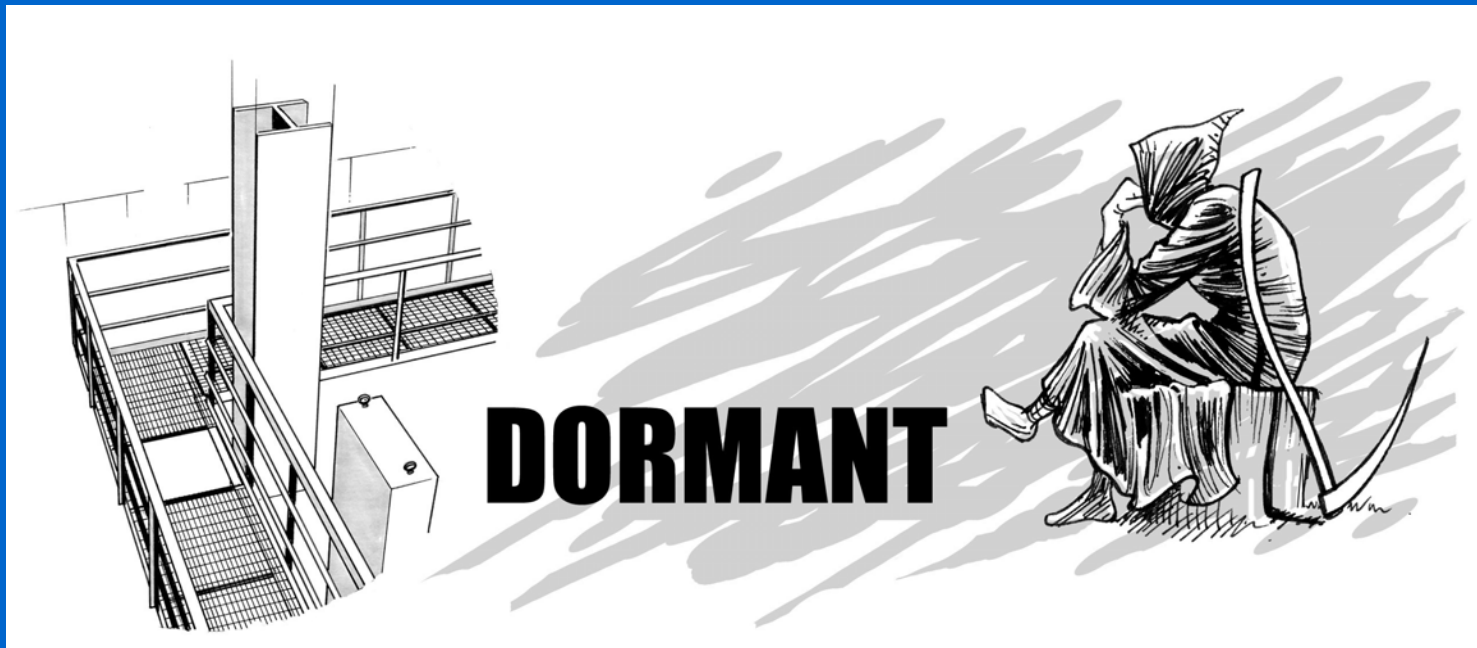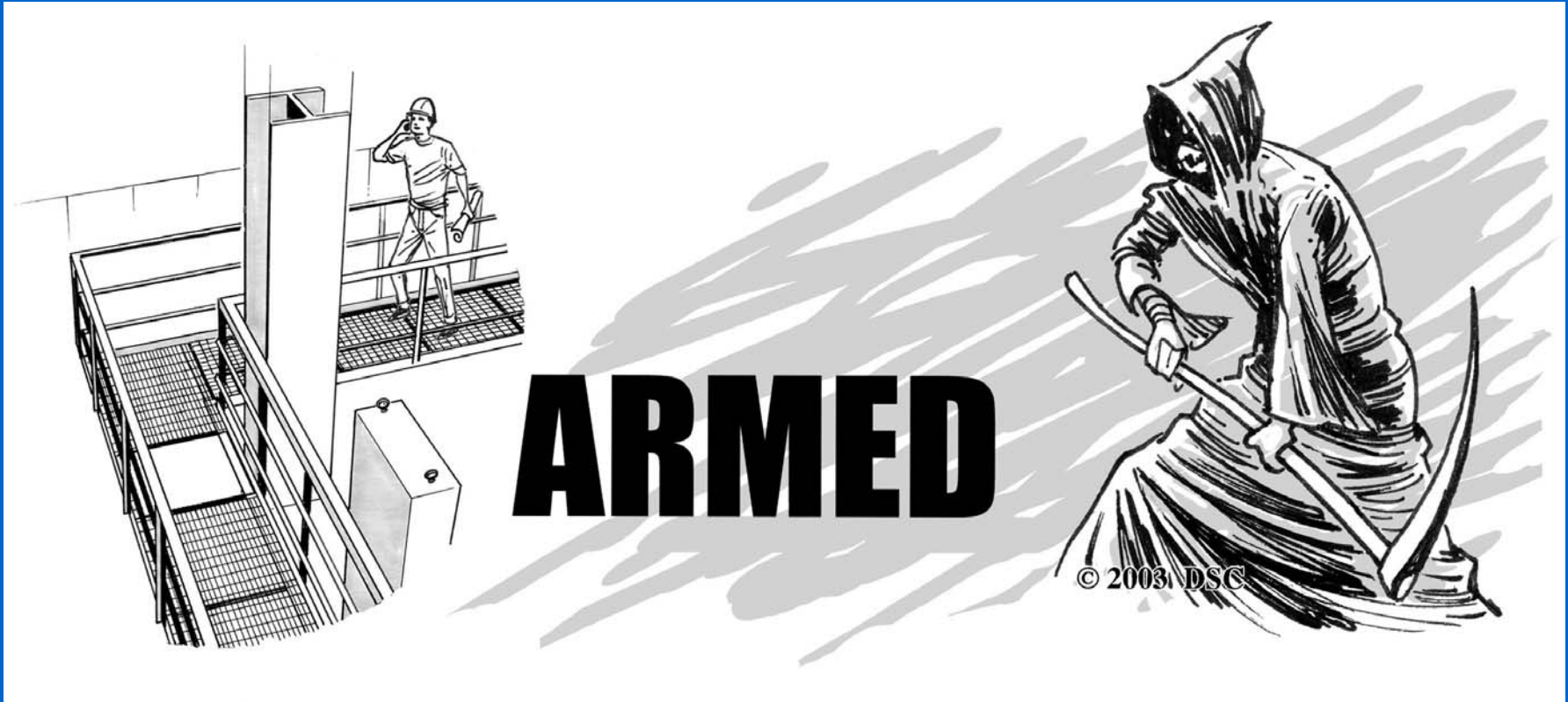
Immediate Solutions

Grating

Plywood

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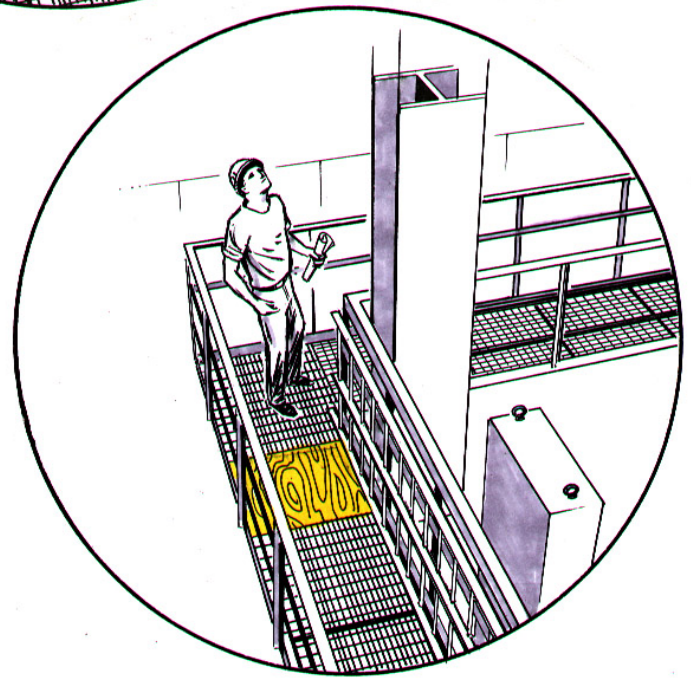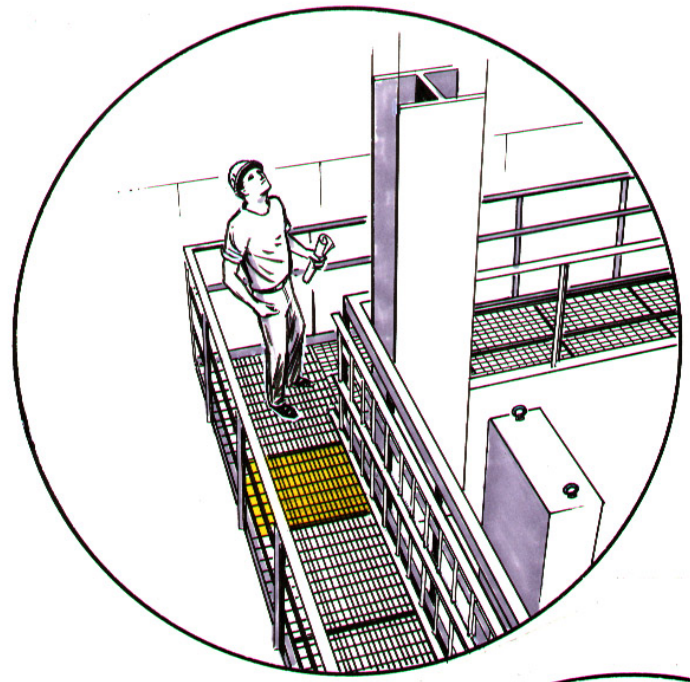
Elimination of catwalk hazard

By Design

Be on the Design Team!

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Sequence for Failed Fall Protection

1. Employer provides harness to worker
2. Employer provides shock absorbing lanyard
3. Employer instructs workers to find secure anchorage for lanyard
4. **Worker does not find suitable anchor**

Conclusion: Lack of Engineered Anchor Point leaves worker with no fall protection.

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Levels of FP Responsibility

- **Management**
- **Qualified Person: Engineer**
- **Competent Persons: Certified by mgmt.**
- **Authorized Users: Trained**
- **Unauthorized users (includes any contract employees)**

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Chain of Responsibilities

- Owner sets FP policy in writing
- Manager follows FP regulations & procedures
- Engineer sets parameters for FP anchors
- Foreman and Safety Director provide system
- Foreman ensures equipment on site
- Trained worker understands site safety
- Worker follows site specific training

100%-100%

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Fall Protection Training

Can Training be successful without field support?

Can Training make a Qualified Person?

How do you develop Competent Persons?

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Fall Protection Training

Can Training be successful without field support?

Can Training make a Qualified Person?

How do you develop Competent Persons?

Certified Training should be a practical course with testing.

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Liability for Fall Hazards

- Control – Who has it; do you?
- What is Management's responsibility?
- What is the internal Safety Professional's responsibility?
- What is the Contractor's responsibility?

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Professional Services Analogy

Medical Diagnosis

- Symptoms: short breath etc
- See physician (generalist)
- Blood Tests
- See Cardiologist (specialist)
- More Tests
- Treatment and oversight

Safety Hazard resolution

- Worker's foot through roof e.g.
- Maintenance confirms problem
- Engineer survey conducted
- FP engineering assessment
- Qualified Person designs FP for roof access, demolition and new roof

What makes you competent to do the job that your company has asked you to do?

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Worker falls from Electric Pylon Queensland Australia 2004

Lanyard A

Lanyard B

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02 11 2004

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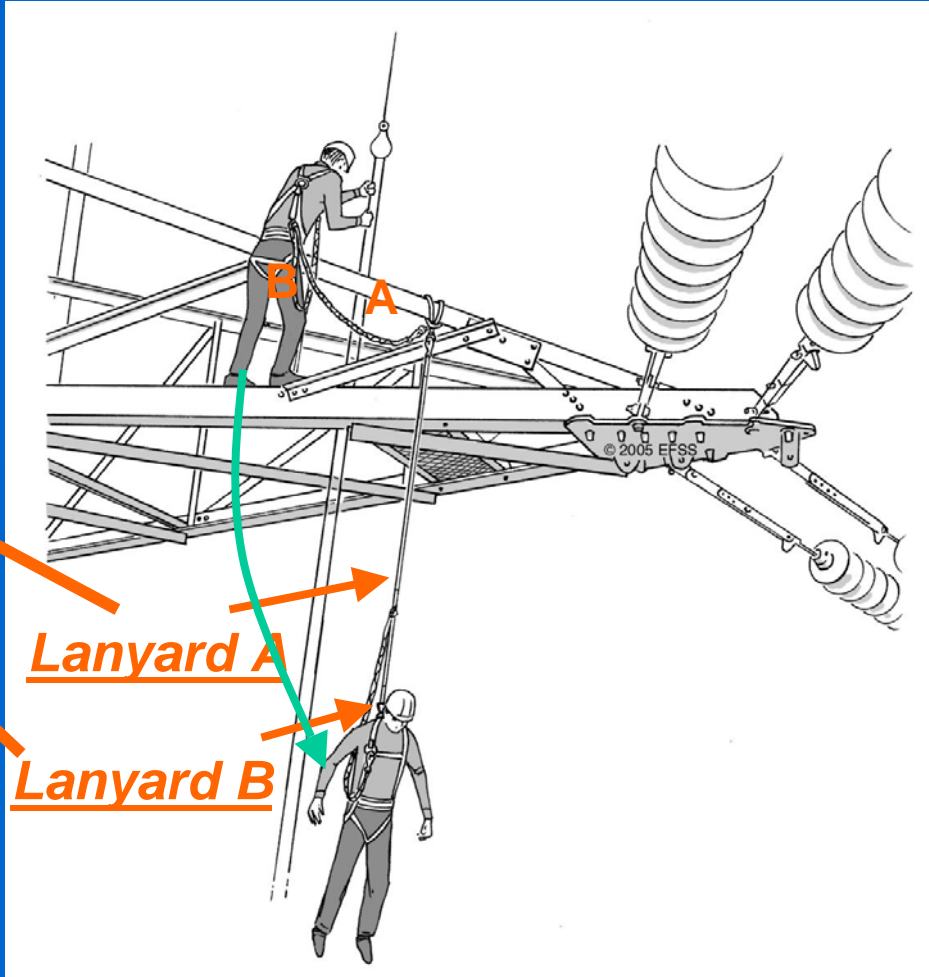
Fall Arrest Expectation!

Worker falls in Queensland Australia 2004
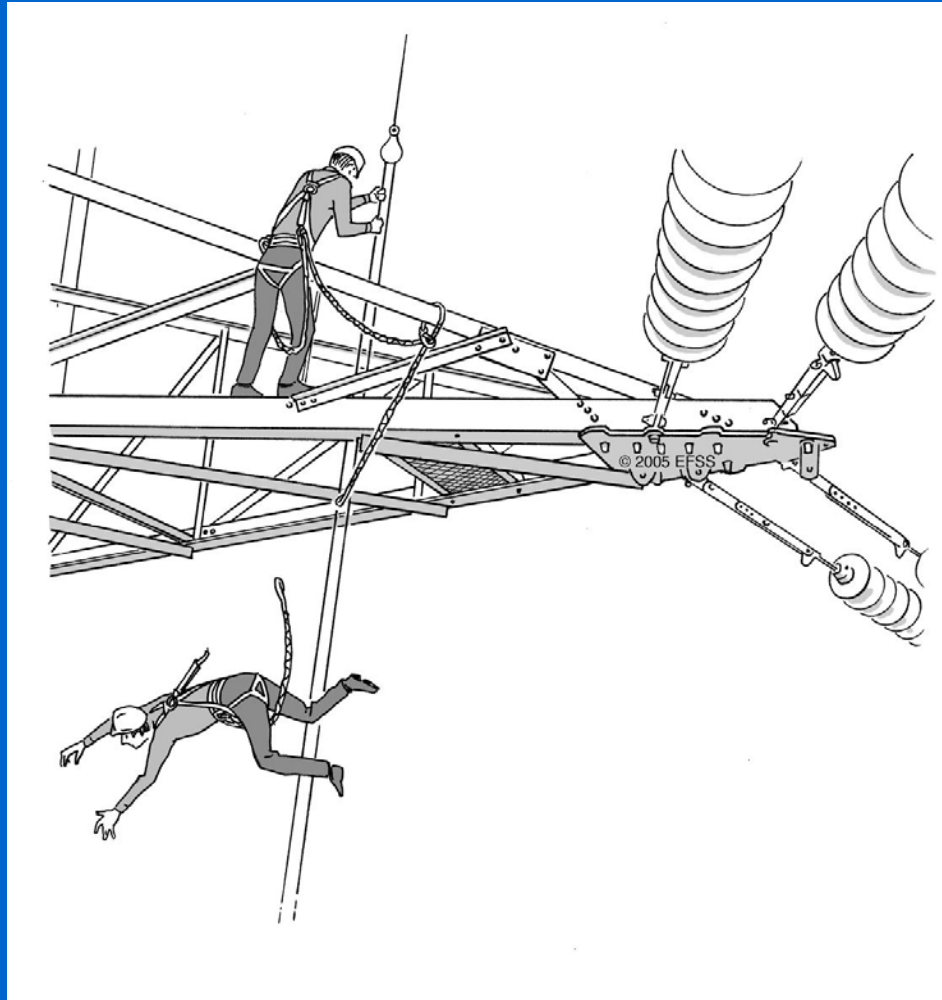
Note unused lanyard:

Between legs attached to side D-ring

Actual result: Fatality

Cause of Queensland fall
Twin tail lanyard

Snaphook

Lanyard #1

Force

Shock Absorber

Force

Webbing loop stitching tore apart

Lanyard #2

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Demo?
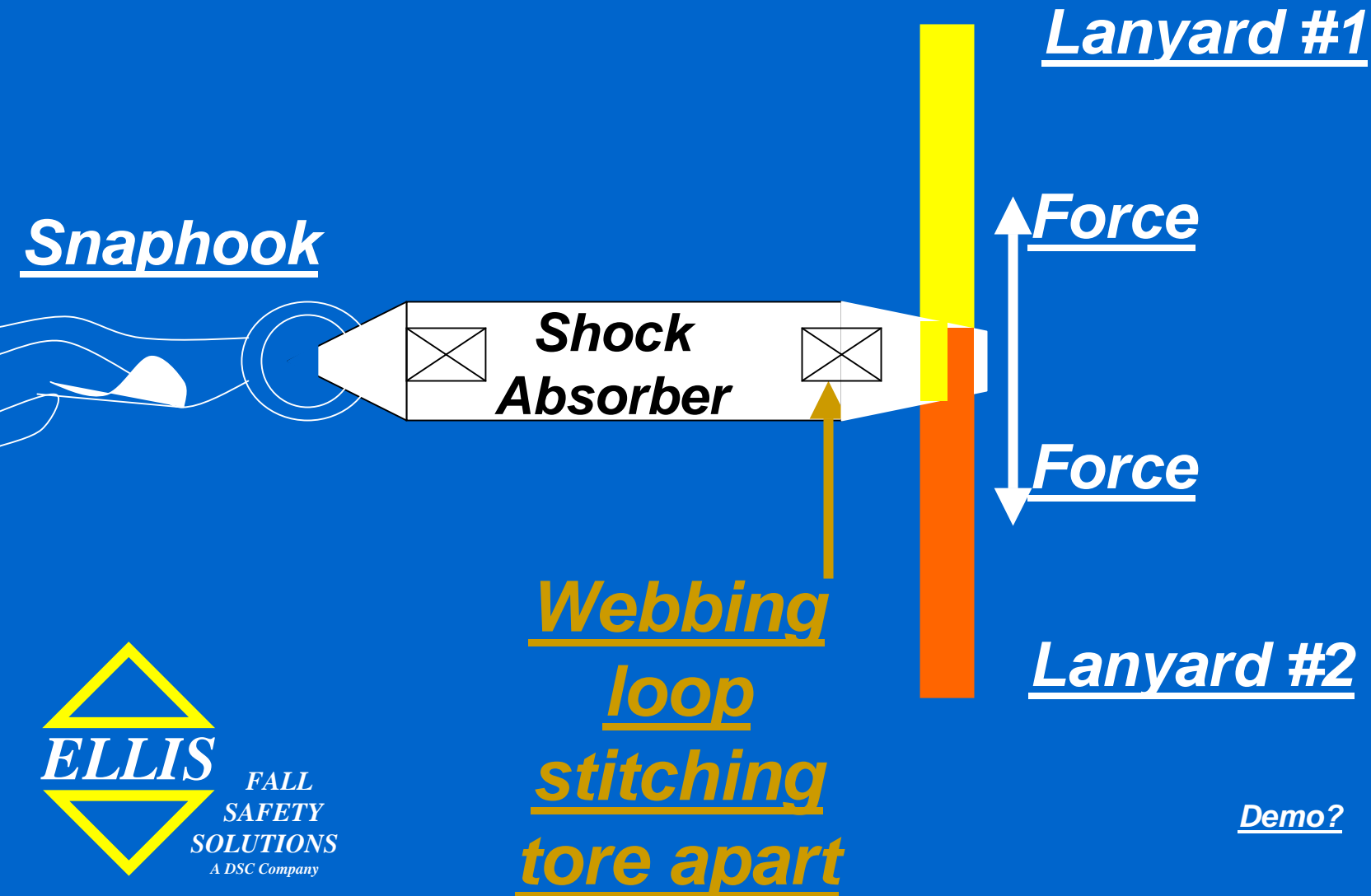
Can you see ………..
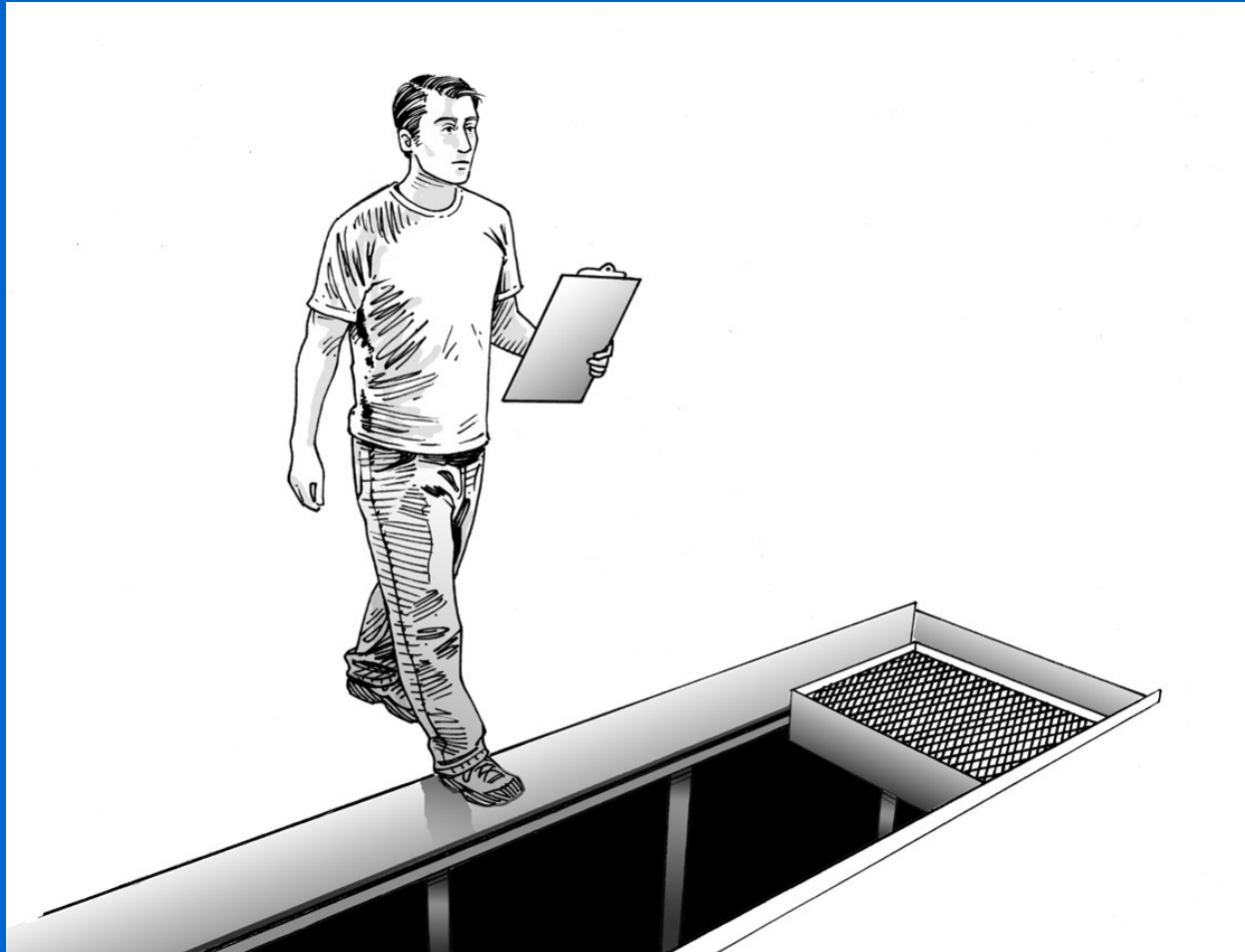
Pit

Hazard

Watch your step OR Cover all holes

Fall Hazard Gathering Plywood:
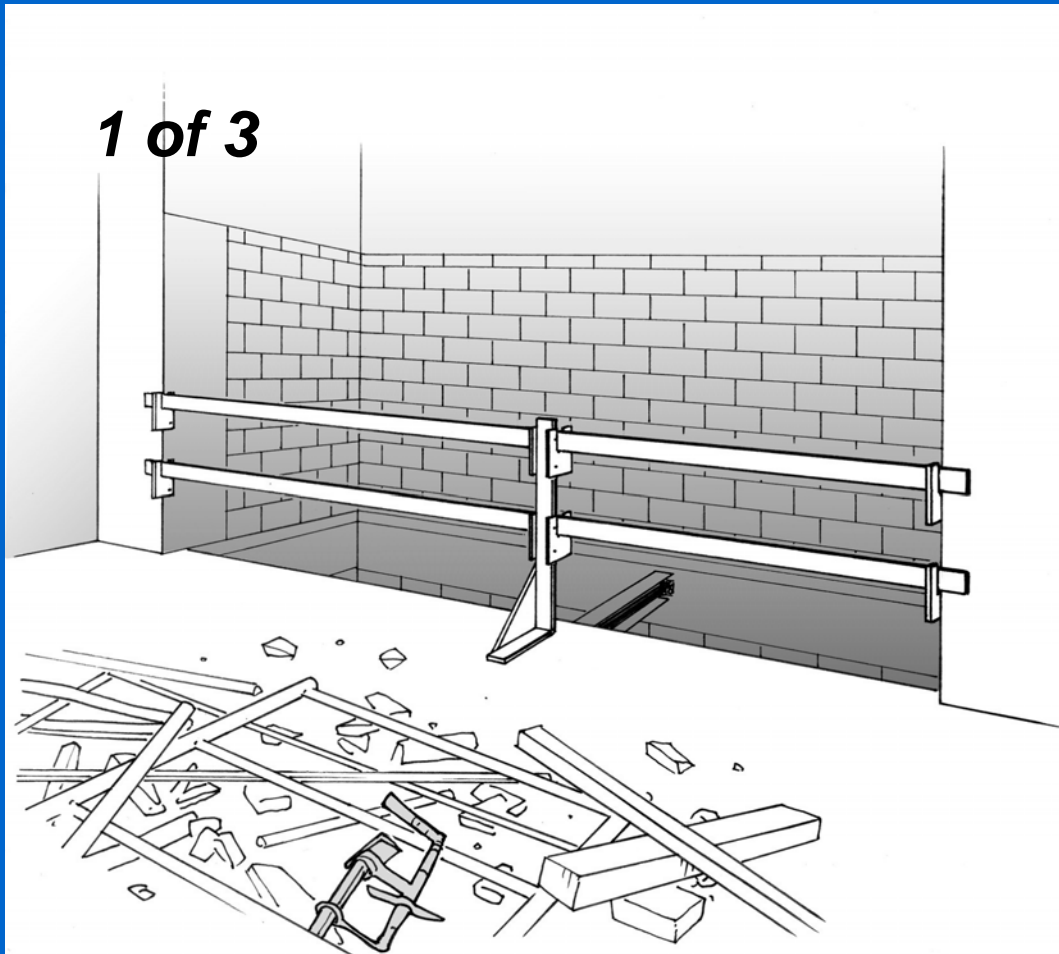
Floor or Roof

1
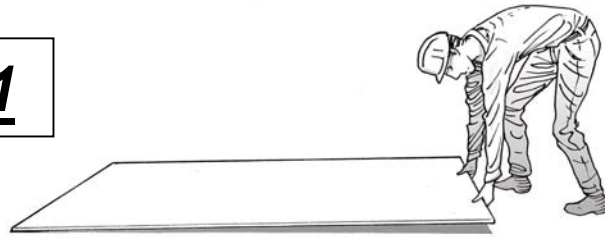
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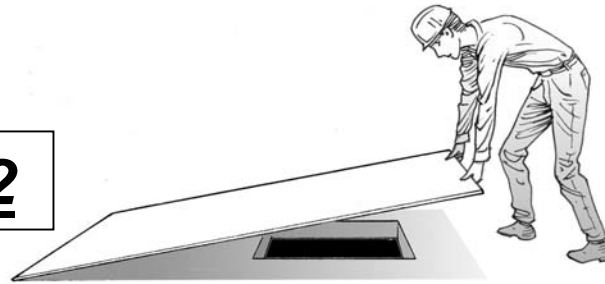
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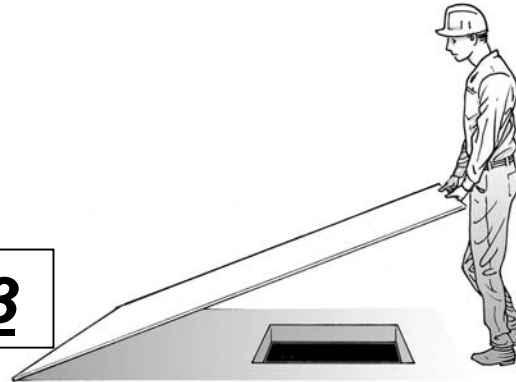
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Lifting Sequence

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What happens:
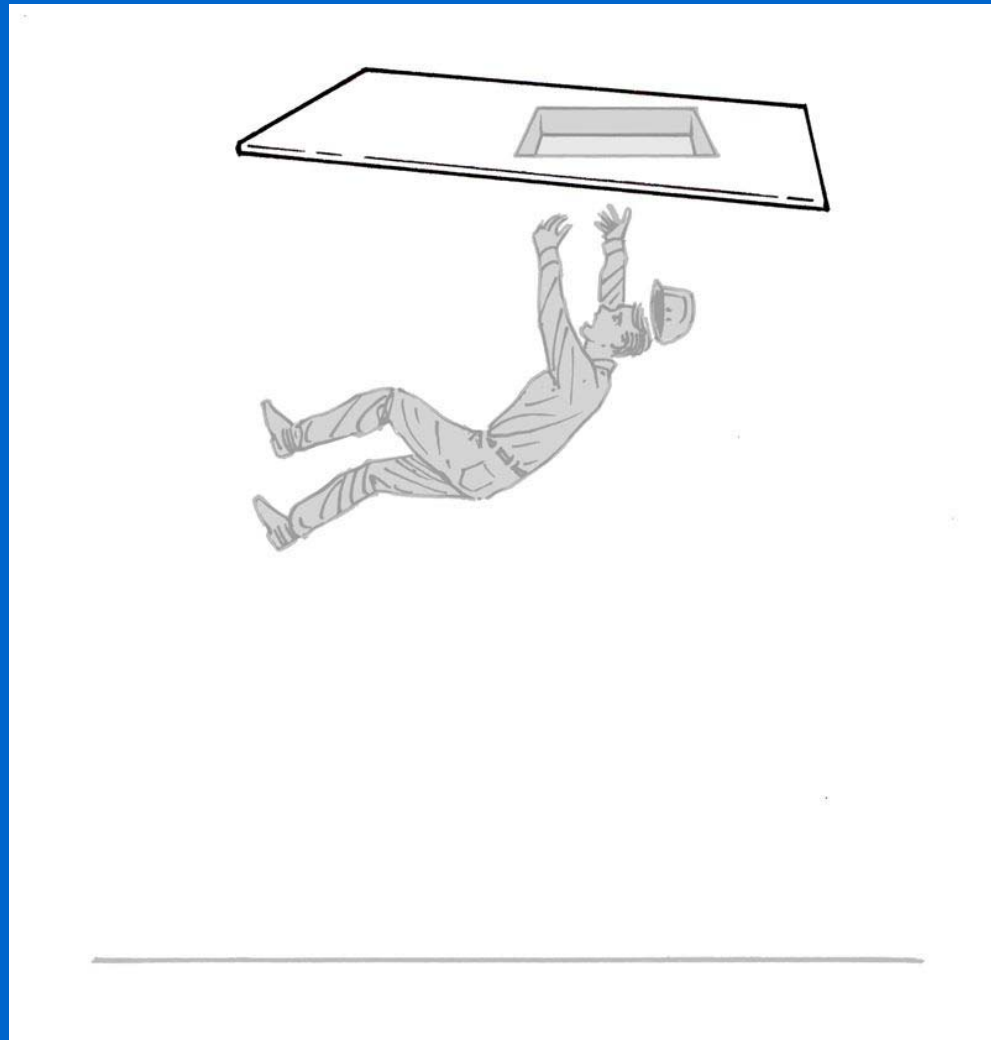
Guarding An Opening

Basic Protection

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Guarding An Opening

Falling Object Protection

Meets OSHA
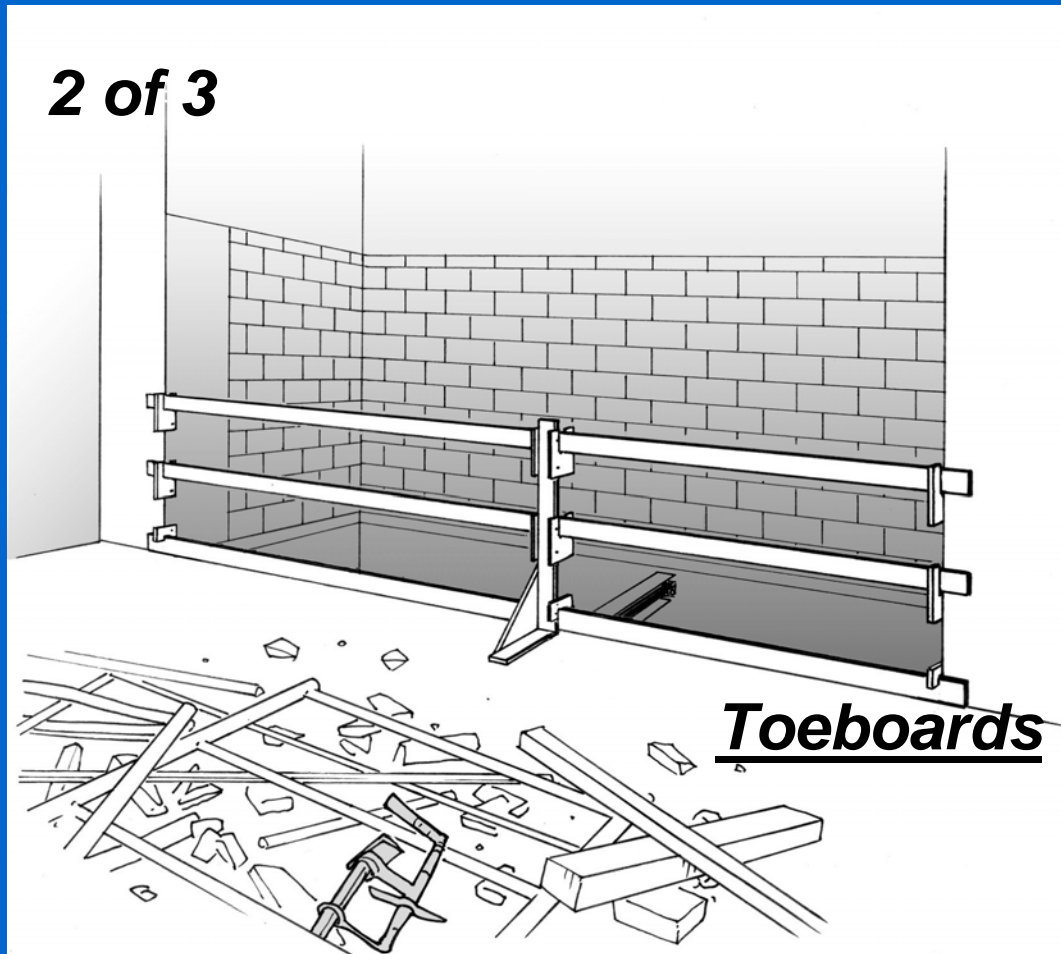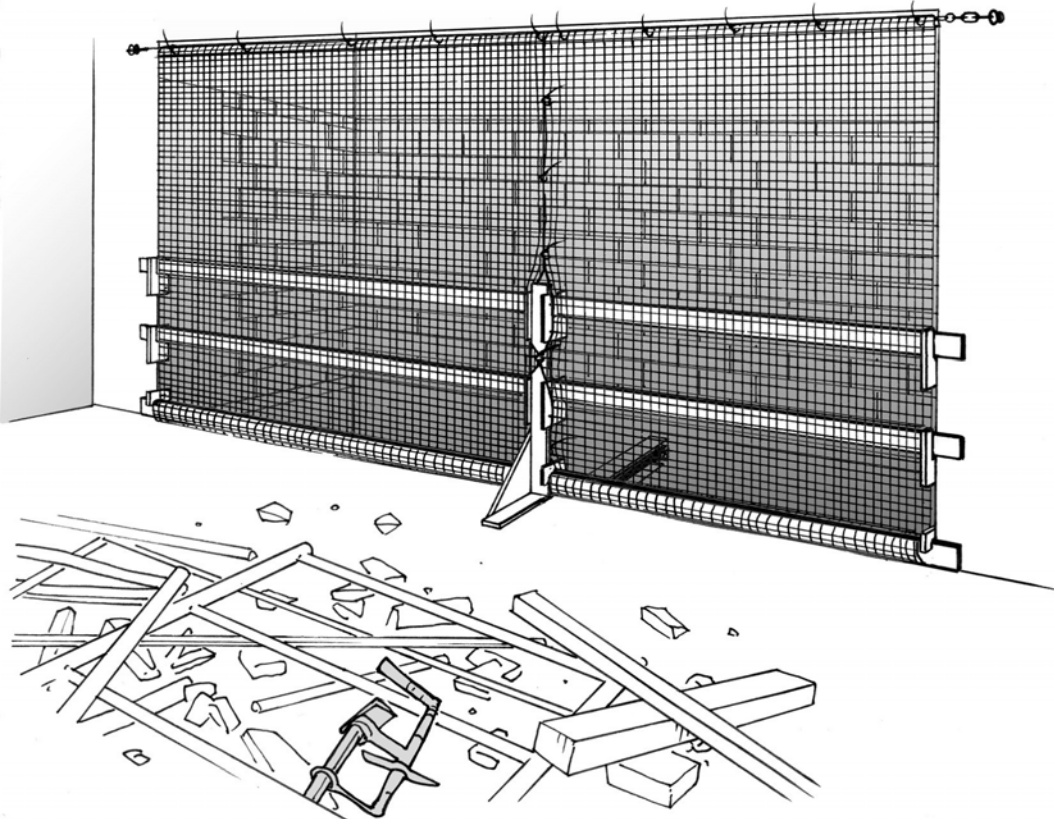
2 of 3

Toeboards

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Guarding An Opening

Falling Object Protection

Manhattan NYC

Vertical Net

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Sloped

Leg

Roofer descending ladder

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How to Address These Issues; What You Need

- Cover management's 100% responsibility for all fall risk, even hidden ones

- Supplement internal safety generalists with **fall safety engineering** specialists

- Have **fall safety engineering** specialists observe physical work space and selected worker practices with internal generalists

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Corrective Action Planning

Following a

Fall Safety Engineering Specialist assessment, results are integrated into a specific corrective action plan that may include:

- changing physical space,

- authoring internal work procedures

- conducting **specific** competent person training.

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Question???

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