WORKPLACE
ACCESS & SAFETY

The hidden risk: What wineries need to know about rooftops

Carl Sachs
Workplace Access & Safety
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Presentation Topics

- OH&S Act, Regulations, Codes & Australian Standards
- Hierarchy of Controls
- Duties of the “controller of the workplace”
- The Audit Framework
- Workplace Access & Safety -

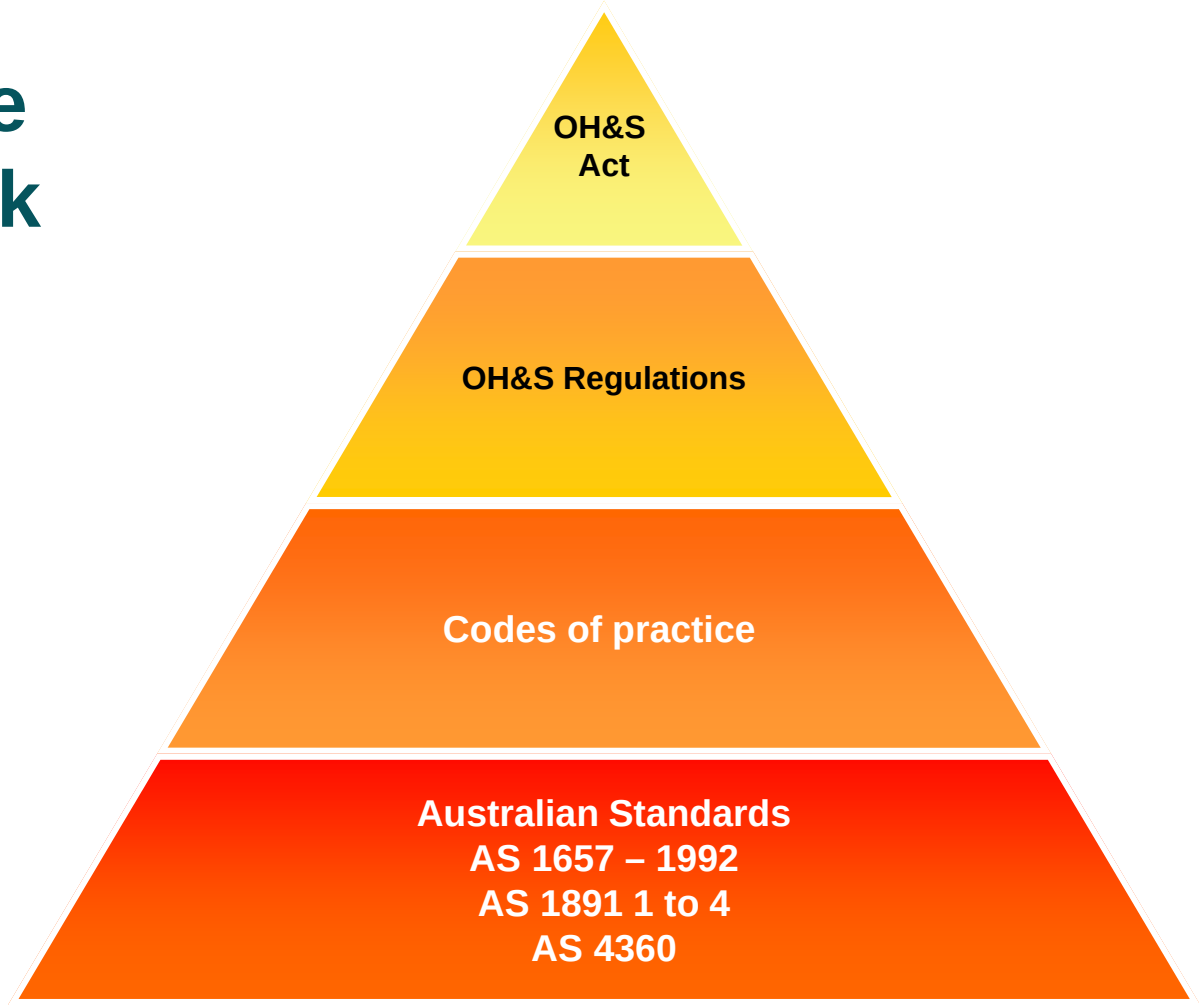
Why it's important

- **Safety** – unforgiving, many deaths
- **Liability** – OH&S Regulations and Act

Michael Tooma

Senior partner, Deacons

Legislative Framework



A big job

- Air-conditioning (Ceiling and roof mounted)
- Extraction
- Trucks/freight
- Vats
- Etc etc

Ongoing costs

Not to be sneezed at!

- Maintenance
- Training
- Annual testing and certification
- Maintaining administrative controls
- PPE
- Removal and replacement of roof anchor and static line systems after 10 years

The hazards

It all begins with a risk assessment

- Access requirements
- Compliance of existing equipment with Australian Standards and Building Code
- Risk ranking

Duties of the controller of the workplace to employees and contractors

- Consult
- Identify Fall Hazards
- Assess the Risk of a Fall
- Control the Risk

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“Controller of the workplace”

Risk rating matrix

	Likelihood			
Severity	**A : Very likely**	**B: Likely**	**C: Unlikely**	**D: Very unlikely**
1 Catastrophic	**High**	**High**	**High**	Medium
2 Major	**High**	**High**	Medium	Medium
3 Moderate	**High**	Medium	Medium	**Low**
4 Minor	Medium	Medium	**Low**	**Low**

Not your standard risk assessment!

- Control measures specified by Regulations
- Hierarchy of Controls – 5 levels
  (1 = safest, 5 = least safe)
- Controls arranged in order of preference
- Use higher order controls “wherever practicable”

What does ‘practicable’ mean?

*“**Practicable** does not just mean the cost in dollar terms”*

Consider:

- The severity of the hazard or risk
- The state of knowledge
- The availability and suitability of ways to remove or mitigate the hazard or risk
- The cost of removing or mitigating the hazard or risk

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What is “reasonably practicable”

Hierarchy of Control

Undertake the work:

Level 1: from the ground or on a solid construction

Level 2: using a passive fall prevention device

Level 3: using a work positioning system

Level 4: using a fall injury prevention system

If a risk remains then:

Level 5: from ladders, or administrative controls

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The importance of the hierarchy of controls

Hierarchy of Control
Level 1: Ground or solid construction

The first level aims to eliminate the hazard altogether

Option A:

Re-design the job to work from ground

For example:

- Relocate plant to ground level
- Clean windows using extendible poles

Option B:

a solid construction, which must be:

- Strong enough to support people + materials
- Non-slip, trip-free surface
- Readily negotiable gradient
- Safe ingress and egress

For example :

A work platform with guardrail and ladder access

Hierarchy of Control
Level 2: Passive fall protection device

Fall prevention equipment that does not require adjustment once installed.

- Temporary work platforms
  - Scaffolds
  - Cherry pickers
  - Work platforms

- Perimeter protection
  - Guard rails
  - Barriers

Hierarchy of Control
Level 3: Work positioning systems

If levels 1 and 2 are “not practicable”, industrial rope access systems and travel restraint systems used to prevent workers falling over an unprotected edge

- Harnesses attached to roof anchors or static lines
- Harnesses with ropes and friction devices

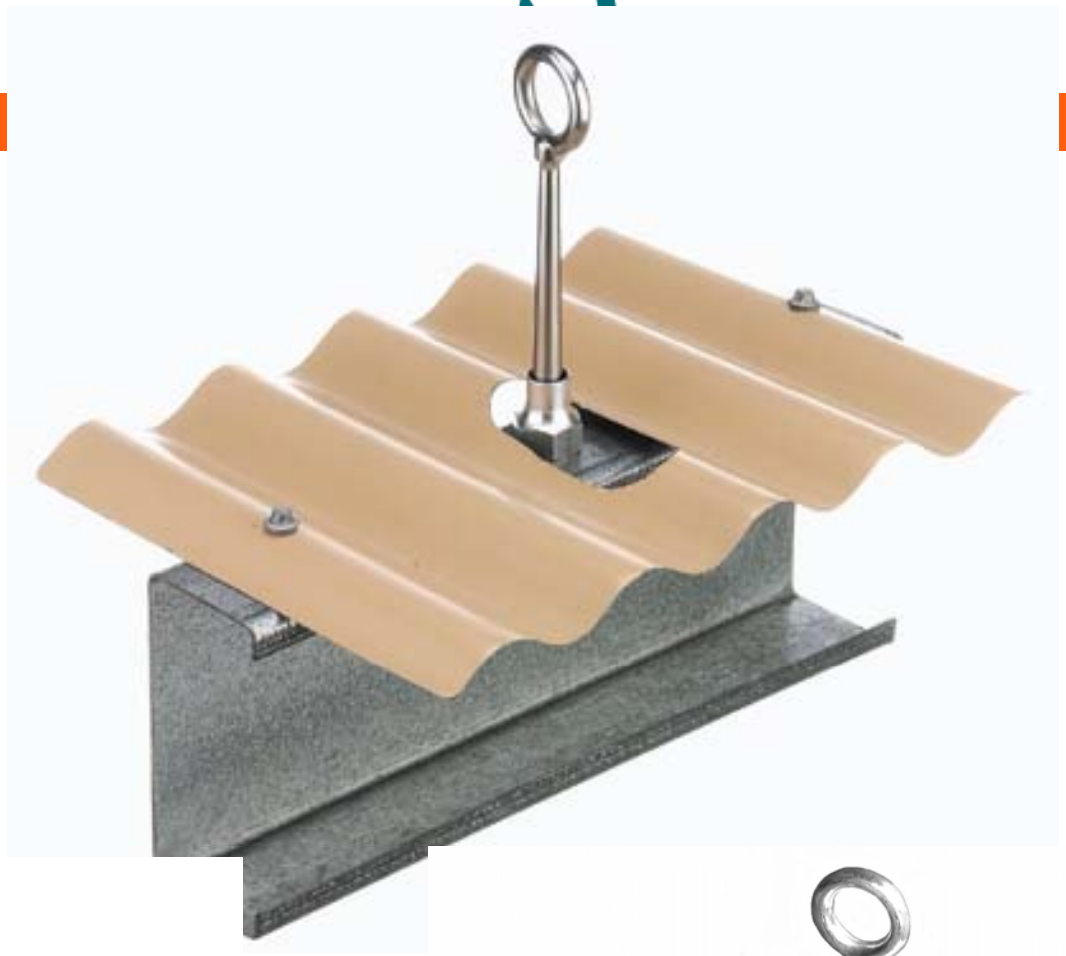
Not as safe as Level 2 (guard rails, etc) because it depends on:

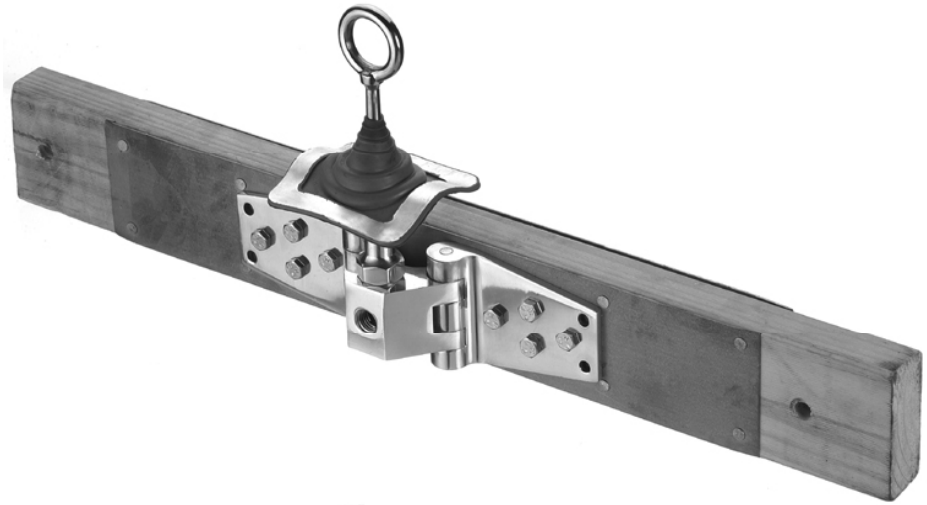
- Operator skill
- Equipment maintenance

Users and their supervisors should undertake competency-based training before implementing Level 3 safeguards.

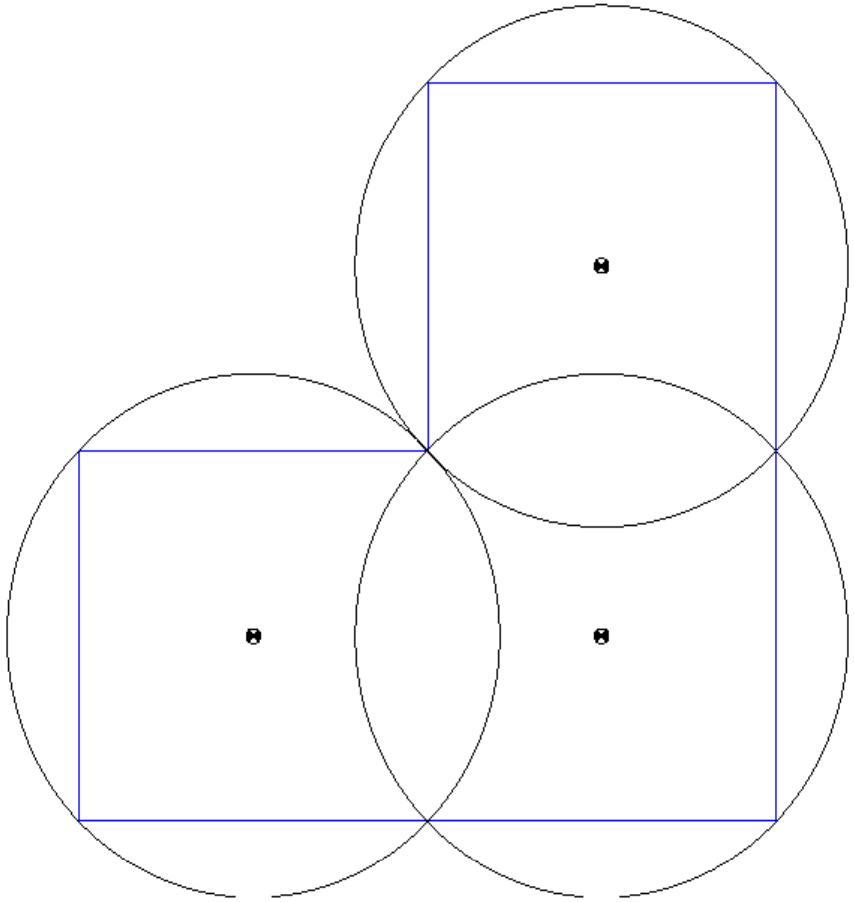
Level 3/4 – Controls

- Load – 15kN to 22 kN
- Fixing
- Compliance plate
- Admin controls
- Inspection



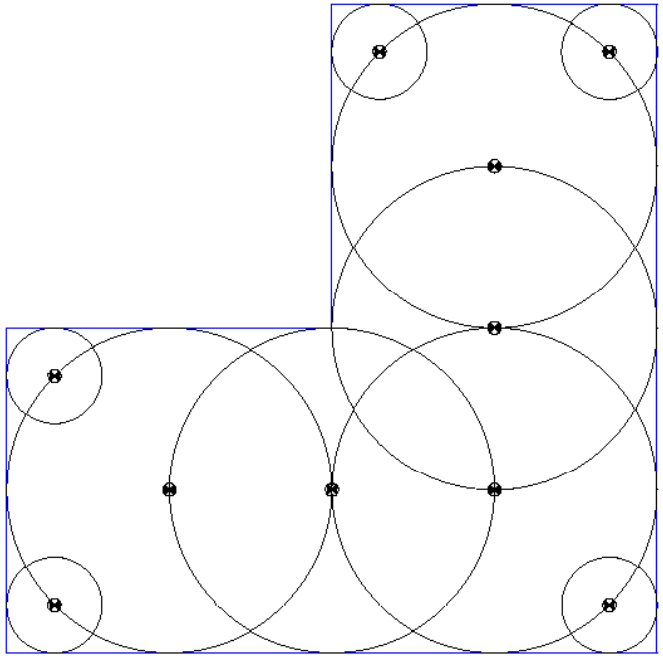


LEVEL 4 FALL INJURY PREVENTION SYSTEM



Level 3 – 4 Comparison

LEVEL 3 WORK POSITIONING SYSTEM



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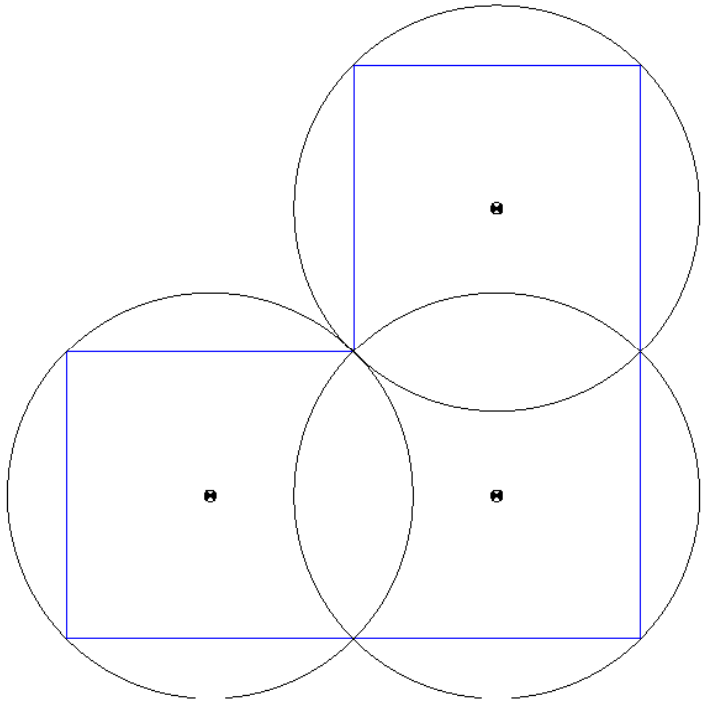
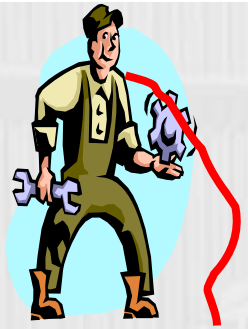




Height of person **(1. 7m)**

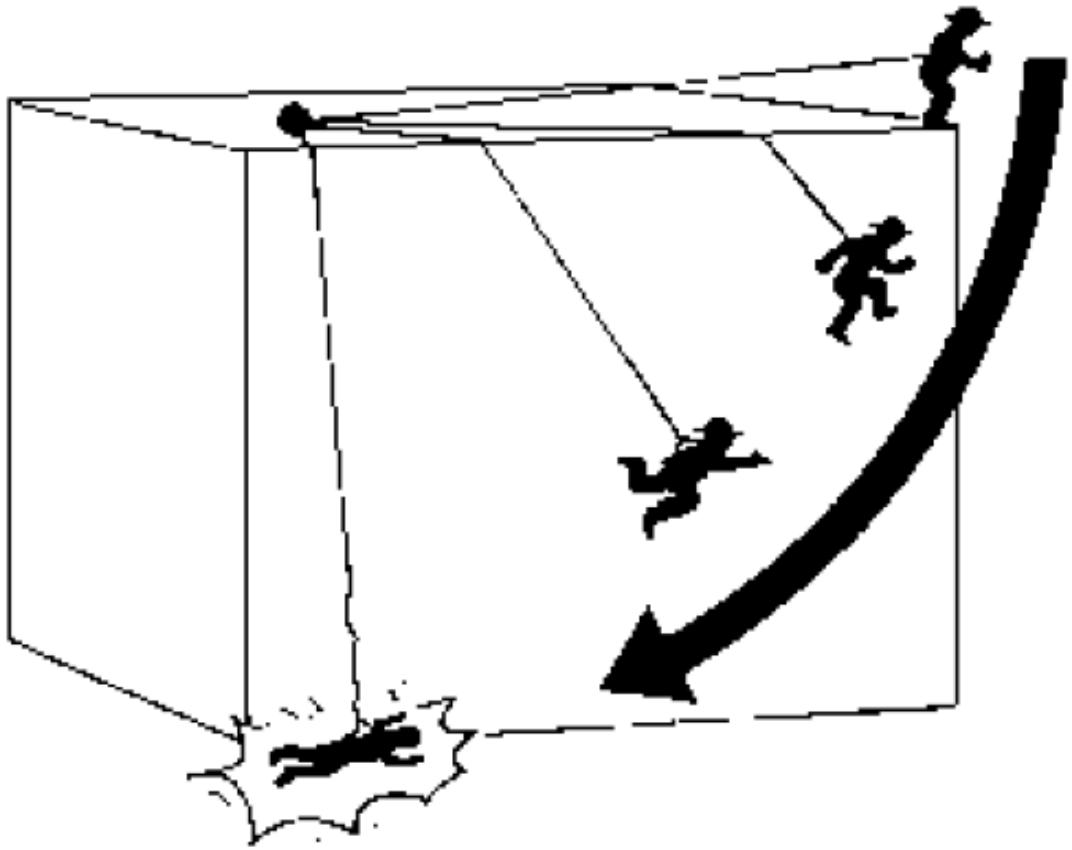
Shock absorber **(1.8m)**

Height of person **(1.7m)**

Safety margin **(1 m)**

Total fall distance 4.5m

The pendulum effect



Hierarchy of Control
Level 4: Fall injury prevention systems

While work positioning systems prevent the fall from occurring at all, level 4 controls merely minimise the distance of the fall.

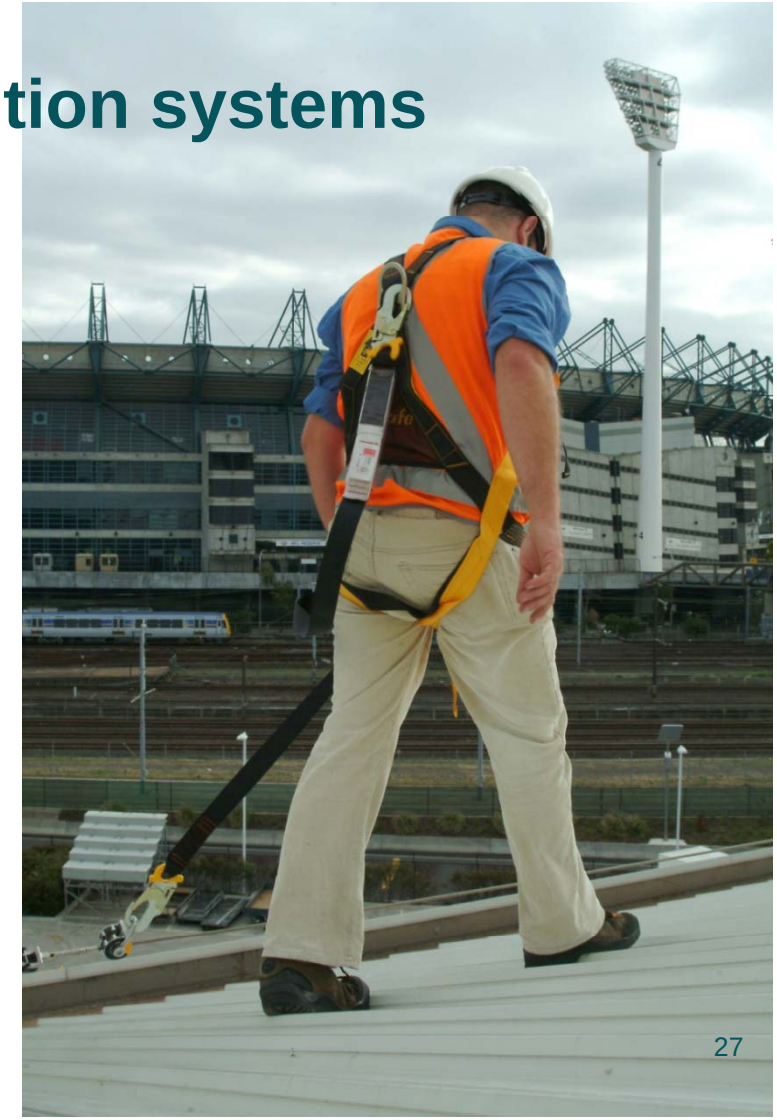
Examples:

- safety nets
- catch platforms
- individual fall arrest systems (IFAS)

Hierarchy of Control
Level 4: Fall injury prevention systems

Safety challenges:

- Requires high level of training
- Must always be supervised
- Emergency plan for speedy rescue



Hierarchy of Control
Level 5: ladders, administrative controls

The last resort

"The reason these two are grouped together at the end of the risk control sequence is that they are equally poor ways to control the risk of a fall."

Hierarchy of Control
Level 5: ladders, administrative controls

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The importance of Australian standards

Implementation tips

1. Scope out the works when doing an RA, budget for 10 years

2. Use the hierarchy of controls (Aim for level 2)

3. As-built drawings and user manuals

4. Experienced installer

5. Tender to your scope

Train and document

- Administrative controls
- Training
- Rescue plans
- Maintenance and recertification

Fall prevention strategy

- **Fall prevention risk assessment**
- **Design brief**
- **Fall prevention action plan**
- **Budget**
- **Construct/install**
- **Training**
- **Document, maintain and recertify**

Questions?

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Fall Prevention Solutions

1300 552 984

Providing a national approach

QLD . VIC . NSW . SA