

LEARNER GUIDE



Work Safely at Heights

Training support material for:

CPCCCM2012 – Work safely at heights

Produced by:



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What is working safely at heights?

There are lots of dangers when you work at heights. Every year lots of people are injured or killed. Some injuries are from people falling. Some are from people dropping tools or equipment on other people below.

In this course you will learn the risks (dangers) of working at heights. You will learn the best way to control the risk to make sure everyone is safe.



Safety at work



QUESTION 13

When is the best time to set up the hazard controls?

The best time is **before** you start work.

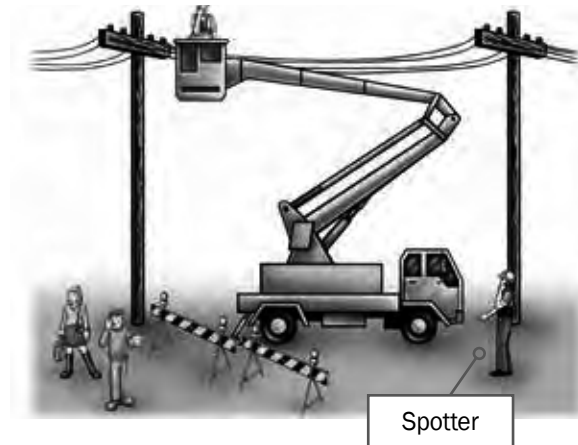
**QUESTION 14**

You are going to work near powerlines. Working near powerlines is very dangerous and can kill you.

What are the minimum safe distance rules you must follow?

The minimum safe distance rules you must follow can be different for each state/territory. For example, in some states you must use a spotter.

A spotter is someone who helps you work closer to uninsulated powerlines.



QUESTION 23

Risk means how likely it is somebody may be hurt or killed by a hazard.

What questions do you need to ask when assessing the risk?

What controls are in place?



Do the controls work?



Can you do it a safer way?



Working at heights



Working at heights

Every year many people are hurt or injured while working at heights. The biggest risks are falls, or tools and equipment being dropped on someone.

This section explains the types of work people do at heights. It also explains the types of hazards and controls you must think about when working at heights.



QUESTION 44

Why must you regularly check your safety system?

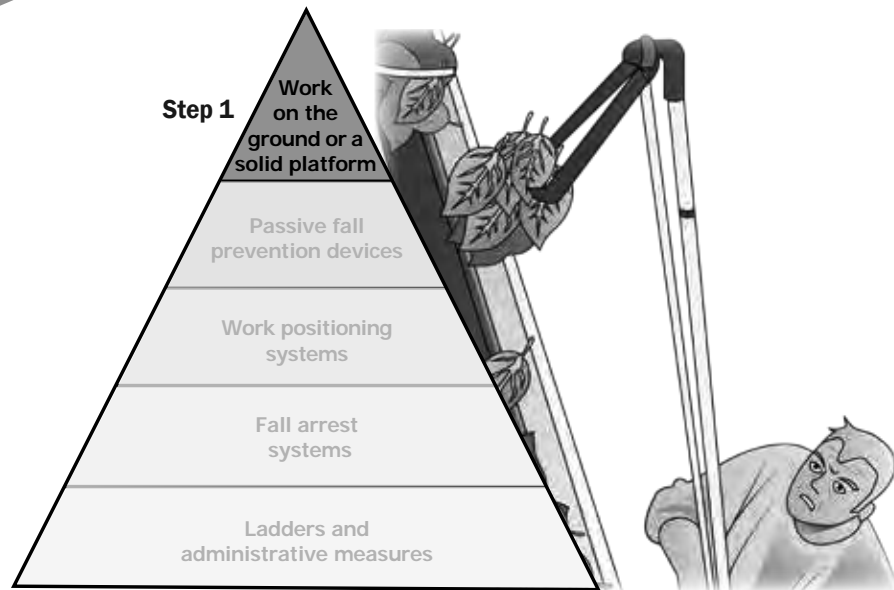
To make sure it is still safe and works properly.



Prevention of falls hierarchy of control measures



Step 1 - Work on the ground or a solid platform



Step 1 – Work on the ground or a solid platform

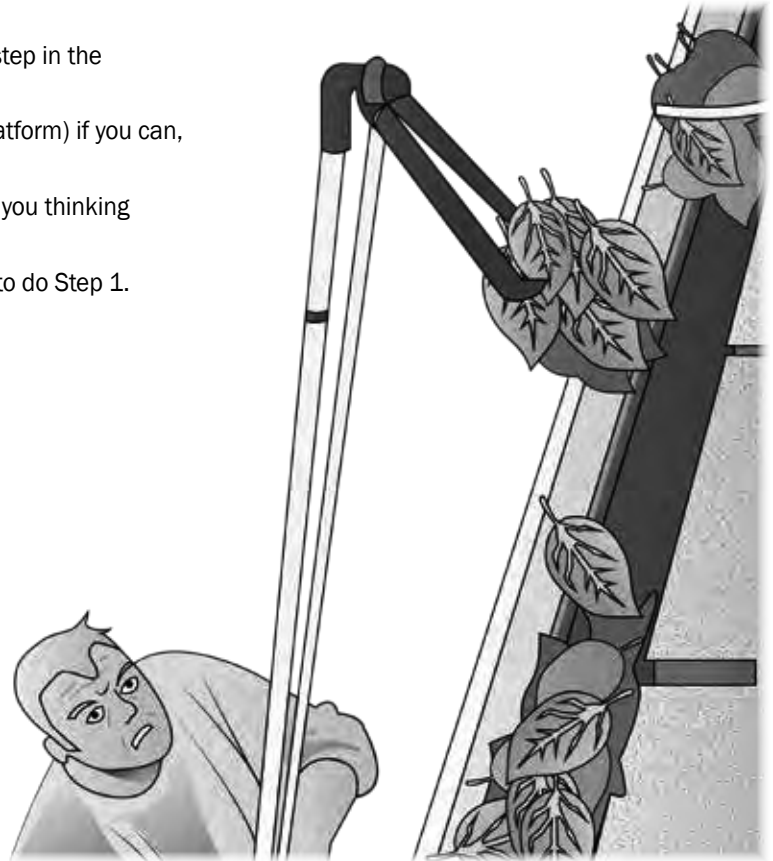
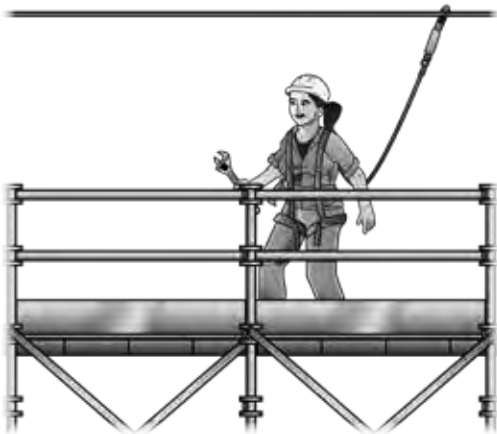
Step 1 is to work on the ground or a solid platform.

You should always do Step 1 if you can. This is the first step in the Prevention of Falls Hierarchy.

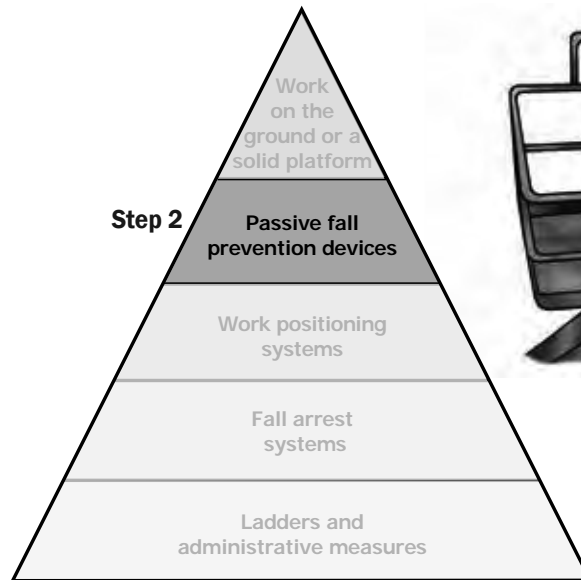
The law says you must work on the ground (or a solid platform) if you can, instead of working up high.

This chapter tells you what a solid platform is, and gets you thinking about ways to do the work from the ground.

You should only ever move to Step 2 if it is not possible to do Step 1.



Step 2 - Passive fall prevention devices



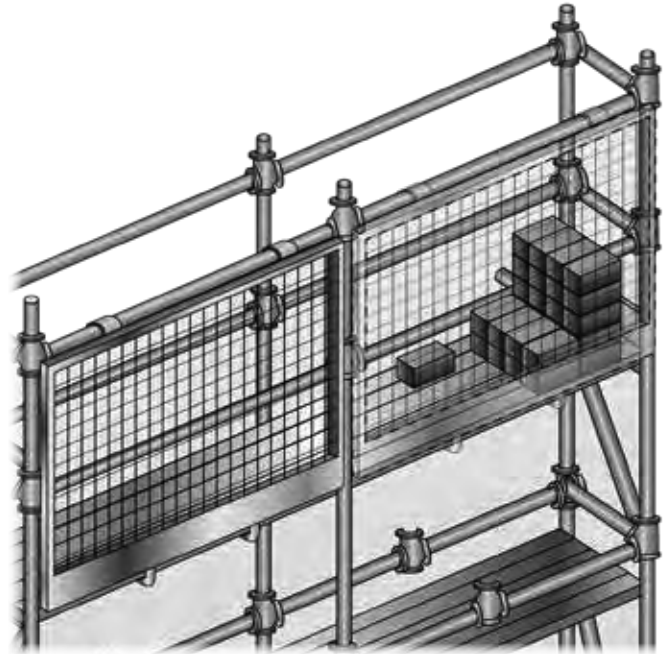
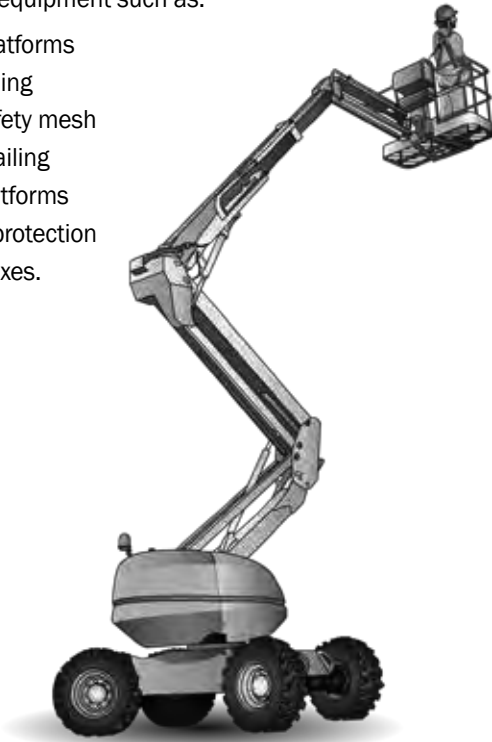
Step 2 – Passive fall prevention devices

If you can not use Step 1, you can move to Step 2 - Passive fall prevention devices.

Passive fall prevention devices are pieces of equipment which stop you from being able to fall.

It includes equipment such as:

- Work platforms
- Scaffolding
- Roof safety mesh
- Guard railing
- Step platforms
- Trench protection
- Work boxes.



QUESTION 52

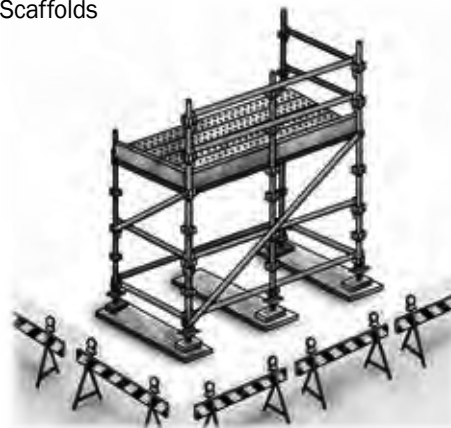
Passive fall prevention equipment stops you from being able to fall from an edge or through a hole.

Name some passive fall prevention devices.

Perimeter screens



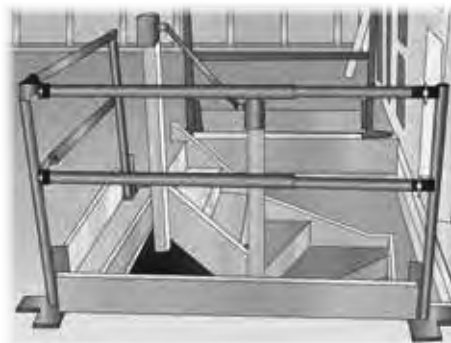
Scaffolds



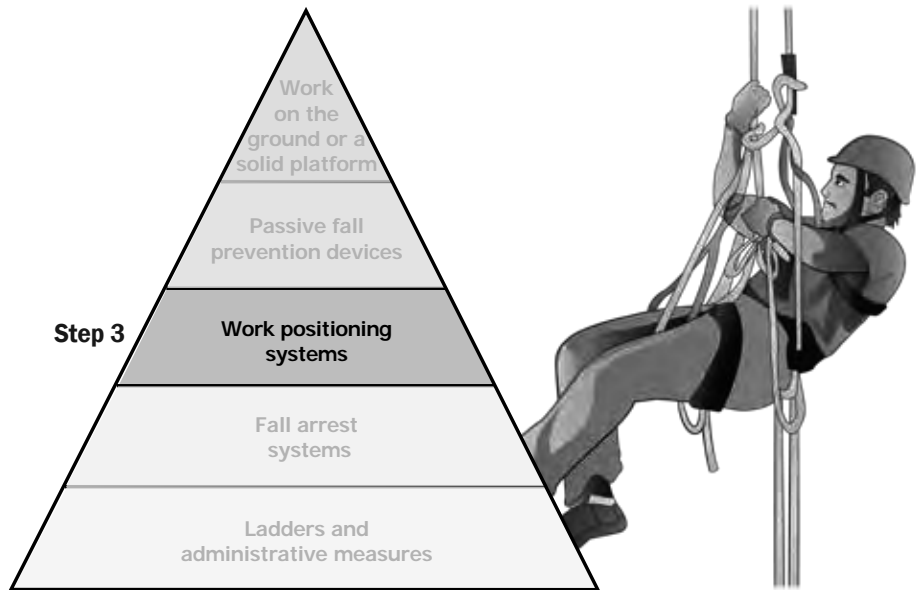
Temporary work platforms –
such as scissor lifts,
cherry-pickers, workboxes,
or EWPs.



Guard railing

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Step 3 - Work positioning systems



Step 3 – Work positioning systems

If you can not use Step 1 or 2, you can move on to Step 3 - work positioning systems.

A work positioning system keeps you supported and safe while you are working.

There are two types of work positioning systems.

1. Industrial rope access systems.
2. Travel restraint systems.



QUESTION 70

What are the two (2) types of work positioning systems?

1. Industrial rope access system.



2. Travel restraint system.

**QUESTION 71**

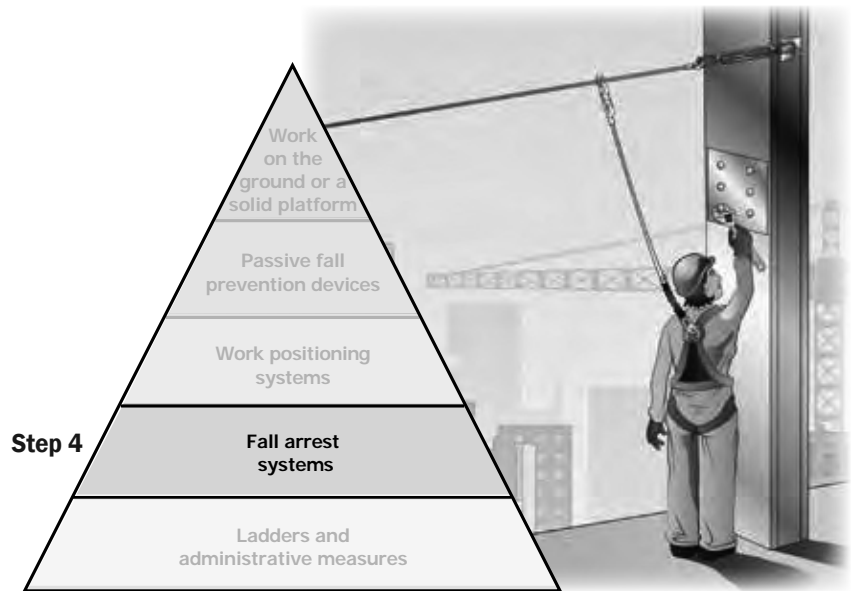
What is an industrial rope access system?

Who is allowed to use it?

It is a system of ropes used to gain access to an area.
You can only use it if you have successfully completed a competency based course.



Step 4 - Fall arrest systems



Step 4 – Fall arrest systems

If you cannot control the fall risk with Steps 1, 2 or 3 you can move to Step 4 - fall arrest systems.

So far we have dealt with ways to stop people from being able to fall.

Fall arrest systems are used when there is a risk someone could fall.

A fall arrest system slows you down or stops you when you fall.

Fall arrest systems include:

- Harness fall arrest systems
- Catch platforms
- Industrial safety nets.

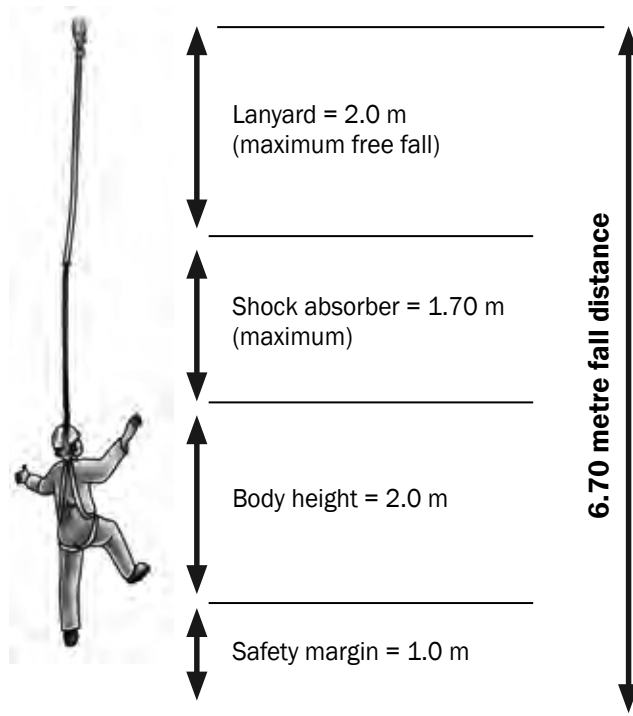


QUESTION 91

You need to design a safety harness fall arrest system.

How do you calculate the fall distance?

Length of lanyard +
Length of energy (shock) absorber, when it extends +
Height of worker +
Safety factor of 1 metre



Note:
If you are anchored to a static line, you also need to allow for stretch in the static line.

QUESTION 99

You need a rescue plan so that if someone falls you can rescue them quickly.

How quickly should you be able to rescue someone who is hanging in their harness?

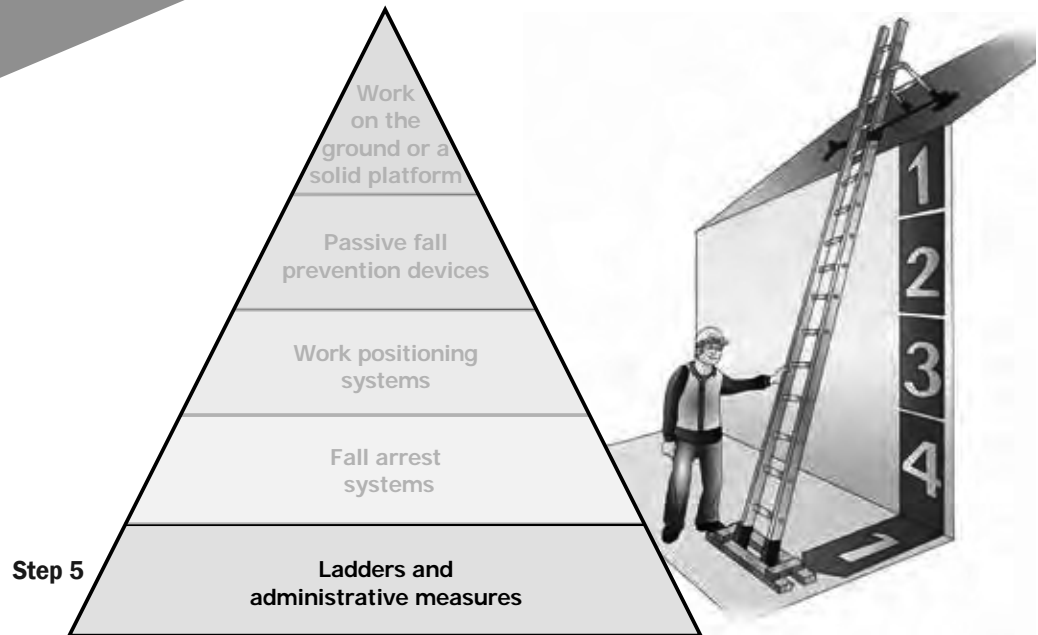
As quickly as possible, but it **MUST** be under 5 minutes.

Any longer and they might suffer serious injury or death from suspension intolerance (suspension trauma).



DOWN IN 5
TO
STAY ALIVE 

Step 5 - Ladders and administrative measures



QUESTION 138

What are some safety problems that stop you from using a ladder?

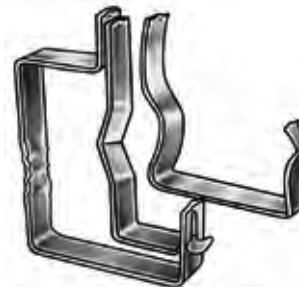
Bent, twisted, kinked or damaged welds or feet on metal stiles.



Cracked, bruised, splintered or out of shape timber stiles.



Worn, broken or missing ropes, brackets and braces.



The ladder is painted



Loose, damaged or missing steps, rungs and top plates.

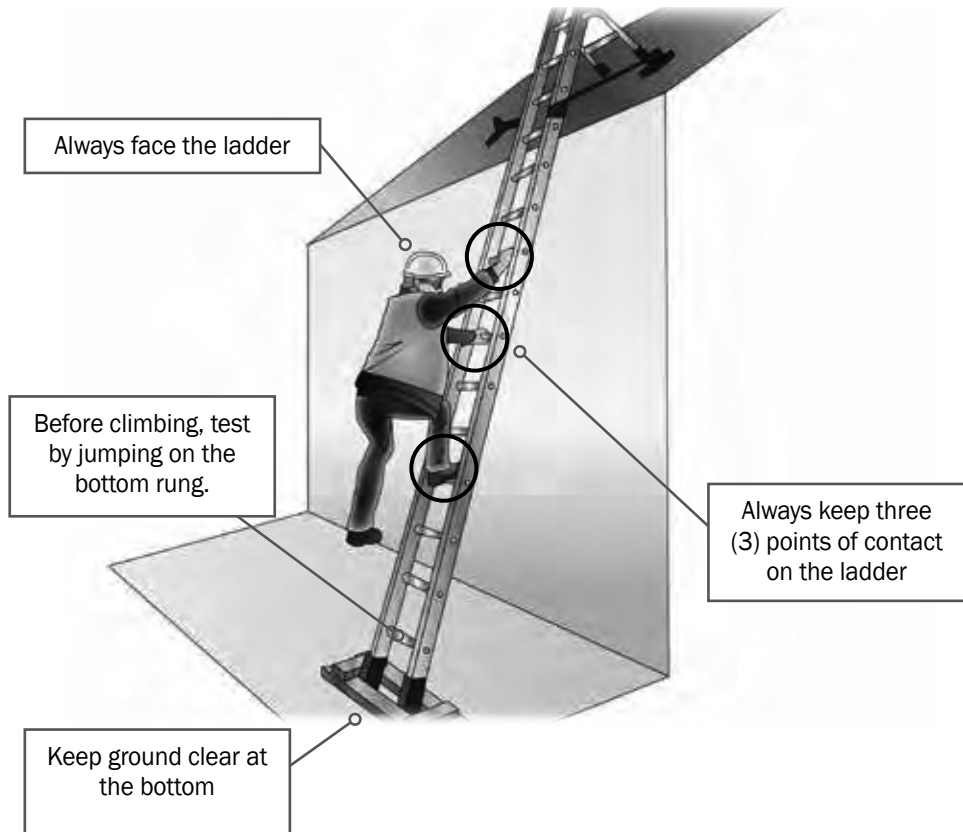


The ladder is not strong enough. All ladders must be rated to 120 kilograms (heavy duty).



QUESTION 143

How do you safely climb a ladder?



Clean up



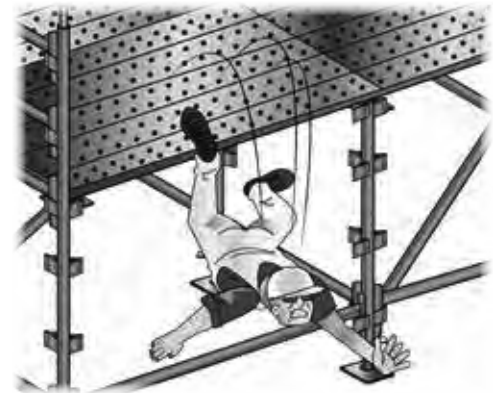
QUESTION 151

When removing scaffolding, what hazards do you need to plan for?

Dropping tools or equipment



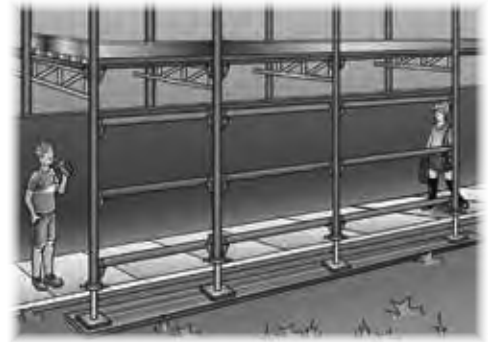
Falling from an unprotected edge



Moving equipment from the scaffold safely to the ground



Making sure workers and pedestrians are safe



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