

The Work at Height Regulations 2005 (WAHR)

Part 4 Case Studies



Overview of this section

- 3 Case studies showing the application of the WAHR
- Includes
 - Accidents/unsafe systems of work
 - Breaches
 - Enforcement options



• Finally, reminder of WAHR links to the FFH Topic pack

Case Study 1

Gutter cleaning



- Gutter blocked by loose leaves causing floods
- 5 metre drop
- Asbestos cement roof with fragile skylights
- Access by forks of FLT

Set the scene

ASK THEM TO SPOT THE BREACHES OF WAHR?

Reg 4 Organisation and planning. Not properly planned, supervised, carried out in a safe manner and inappropriate selection of work equipment.

Reg 5 Competence. Persons engaged in the work including organisation, planning and supervision should be competent.

Reg 6 Avoidance of risk from work at height. Inadequate risk assessment to identify appropriate precautions. Have not applied the hierarchy

Reg 7 Selection of work equipment. Principles for selection of work equipment ignored.

Reg 9 Fragile surfaces. Same hierarchy Avoid, prevent, mitigate. Also no warning notices.

Breaches

- Reg 4 Organisation and planning
- Reg 5 Competence
- Reg 6 Avoidance of risk from work at height
- Reg 7 Selection of work equipment
- Reg 9 Fragile surfaces



Apply the hierarchy



- Avoid?
- Prevent the fall?
 - Utilise an existing place of work?
 - Utilise work equipment?
- Mitigate the fall?
 - Nets?
 - Air bags?
 - Fall arrest?
- Additional measures (Ladders)?

ASK THEM TO APPLY THE HIERARCHY

ASK THE QUESTIONS EG HOW COULD THEY ELIMINATE WAH ETC

ELIMINATE Long handled tool. May not be able to see what you're doing from ground level

EXISTING PLACE No Edge protection or non fragile surface Therefore need work equipment to make safe

FALL PREVENTION Mobile step ladder platform with guard rails, Tower or MEWP would be favoured option.

DISTANCE & CONSEQUENCES Fall arrest PPE No where to clip on, insufficient height for safe deployment. Training and inspection issues.

LADDERS Unable to tie, tendency to overreach/lean, would break gutters

Reg 6

- Eliminate the need - Long handled tool
- Utilise an existing place - No, has fragile surface no parapet or existing guardrail
- Prevent a fall - Utilise MEWP or tower. Preferred option.
- Minimise distance and consequences – Fall arrest, no where to attach. Nets airbags not reasonably practicable.



Additional measures – Ladders, no where to tie on, could overreach

ENFORCEMENT OPTIONS

What would you do

What Regs would you use to take any prosecution

Enforcement options

- PN risk of serious personal injury
- Prosecution
 - Reg 6(3) employer failed to take suitable and sufficient measures to prevent a person falling a distance liable to cause personal injury
 - Reg 9 employer failed to ensure that no person works on a fragile surface where it was reasonably practicable to carry out work safely without doing so



Enf.Cont.

- Reg 4 Unsafe system of work indicates a failure to plan
- Reg 5 Persons organising, planning and carrying out the work not competent

Solutions

- Towers
- MEWP
- Step ladder platforms
- Fork Lift Truck platform

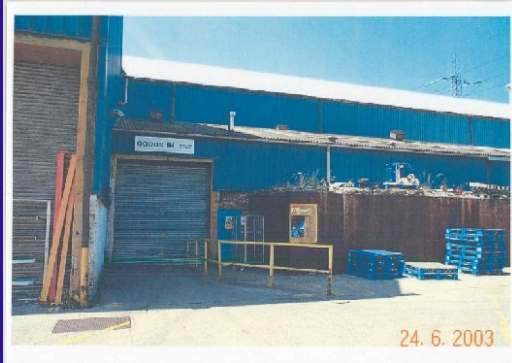


TOWERS, STEP LADDER PLATFORMS, FLT PLATFORMS may be
obstructions or sloping ground

MEWP safe access providing Safe site, Safe plant, safe operator

Note FLT platform OK for occasional use

Gutter cleaning accident



CIRCUMSTANCES

LA enforced cash and carry warehouse.

After heavy rain it was noticed that gutters were blocked

2 employees accessed roof using a pallet raised on the forks of an FLT

One fell 35 feet through a skylight sustaining fatal injuries.

Gutter cleaning accident cont.



CIRCUMSTANCES CONT.

Had a safety cage available (PM28 allows non integrated platform to be used for occasional short term work but **not** construction work)

Had used contractors in the past with a cherry picker.

BREACHES

No planning Reg 4 (including lack of supervision)

Not competent to work at height Reg 5

No risk assessment Reg 6

Unsuitable work equipment for access Reg 7

No protection for work on fragile surfaces Reg 9

Fined £25,000

Case Study 2

Skip loading



Background

- Recent cases involving serious injuries from falls during skip loading activities (up to 3 metre falls)
- Involve skip filling at industrial premises (not activities involving the delivery and collection of skips)
- Common in HSE and LA premises
- Often not covered by risk assessment



Results in unsafe practices

- climbing skips, access using forks or pallet, walking on load etc

13 Major in North West Region alone. Couple of fatalities in recent years

Apply the hierarchy

- Avoid?



Avoidance?



Compactor – loaded from ground level

Self tipping bins

Mechanically loaded eg excavator bucket, conveyor?

Also automatic sheeting systems take out the need to access height

Apply the hierarchy

- Prevent the fall?
 - Utilise an existing place of work?



Utilise an existing (safe) place of work



FOLLOWING AN ACCIDENT

IP climbed skip to remove an overhanging piece of wood, fell 3 metres sustained broken ribs. Fined £16.000

SOLUTION

Now place skips next to the loading bay. Skips can be loaded safely from behind permanent metal guardrails as seen in the picture. Complies with 6(4)(a)

Apply the hierarchy

- Prevent the fall?
 - Utilise work equipment



Provide a platform with edge protection.

MEWP cherry picker?

FLT platform? No because it is not occasional work therefore need a better solution.

Apply the hierarchy

- Mitigate the fall?



Nets and airbags impractical.

Fall arrest no where to attach

Not really reasonably practicable solutions.

Additional measures

- ladders?



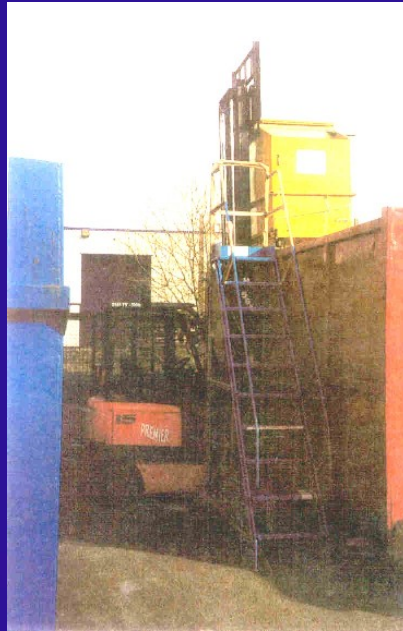
No where to tie onto

Unsuitable if carrying a load

Could slip

Overreaching

However



- Step ladder platform
- Offers handrail and safe working platform

Disadvantages

Relies on operator moving it into position. Manual handling implications for heavy loads.

Could impede FLT movements

Solution

- Avoidance
 - Compaction systems
 - Self tipping bins
 - Mechanical loading
- Fall prevention
 - Existing place
 - Working platform
 - Mobile step ladder platforms



Other avoidance measures



Takes out the need to access height to flatten down loads or deal with overhanging loads

Case study 3

Inspection of work equipment



ASK WHAT BREACHES THERE ARE?

Reg 12 Inspection of work equipment

Inspected before use 12(2)?

Inspected at suitable intervals 12(3)?

Reg 14(1) Duties of persons at work

-Person working under the control of another person should report any defect

Why not reg 13? Answer ladder is work equipment

Breaches

- Reg 12 Inspection of work equipment
 - Inspected before use 12(2)?
 - Inspected at suitable intervals 12(3)?
- Reg 14(1) Duties of persons at work
 - Person working under the control of another person should report any defect

Solution

- Appropriate inspection regime to detect any defects
- Backed up by maintenance regime which includes
 - simple inventory
 - allocation of responsibility for maintenance



central storage

Inventory, storage, allocation of responsibility = CONTROL
Duty to maintain is still in PUWER not WAHR.

WAHR links with the FFH Topic pack

- Remember the 3 risk control indicators
 - Identify the activities and precautions involving FFH including fragile surfaces
 - Selection, use and maintenance of equipment
 - Systems for the procurement and control of contractors



FFH – Falls from height

Identify the activities and precautions

- Reg 4 Organisation and planning
- Reg 5 Competence
- Reg 6 Avoidance of risks from work at height
- Reg 9 Fragile surfaces



Reg 4 Involves identifying the work and ensuring adequate precautions are taken (See Template Notice 1, Identify work at height risks and appropriate precautions)

Reg 5 Involves ensuring workers are instructed in the precautions and are competent

Reg 6 Is the risk assessment process where the duty holder needs to identify all work at height and use the hierarchy to help identify reasonably practicable precautions to avoid risk. (Template Notice 1)

Reg 9 Duty holder uses a hierarchy to identify reasonably practicable precautions when considering work involving fragile surfaces. Also needs to provide warning notices at approaches (Template Notice 1 and 4 marking fragile roofs)

Selection, use and maintenance of equipment

- Reg 7 Selection of work equipment for work at height
- Reg 12 Inspection of work equipment



Reg 7 Involves taking account of various factors when selecting work equipment appropriate for the task (Template Notice 1 relevant as identifying precautions will involve identifying suitable work equipment)

Reg 12 requires work equipment used for work at height to be inspected. (No template notice but can PN individual kit or issue an IN for inspection systems to be set up)

Systems for the procurement and control of contractors

- Reg 4 Organisation and planning
- Reg 5 Competence



Reg 4 and 5 (Template Notice 3 requires the implementation of a system for managing contractors)