

The Work at Height Regulations 2005 (WAHR)




HSE
Health & Safety
Executive

Photo by Vincent Laforet / The New York Times

Timetable and information

- Regs apply from 6th April 2005
- Press release on HSE Website at <http://www.hse.gov.uk/press/2005/c05008.htm>
- Copies of a brief guide to the Regulations is available from <http://www.hse.gov.uk>
- **The Work at Height Regulations 2005 (S.I.2005 No 735)** is accessible via the



HMSO website at:

<http://www.legislation.hmso.gov.uk/si/si2005/20050735.htm>

NO TRANSITIONAL ARRANGEMENTS

Course overview

- Part 1 Introduction to the Regulations
- Part 2 Definitions
- Part 3 Legal requirements
- Part 4 Case Studies
- Part 5 Fall protection (Schedules 2-5)
- Part 6 Ladders



The Work at Height Regulations 2005 (WAHR)

Part 1 Introduction to the Regulations



Drivers for change

- Falls are the biggest killer in the workplace
- Existing piecemeal legislation
- HSC wants single set of Regs for all sectors
- Centrepiece of HSC Falls From Height Programme



Need to implement the Directive

WHY HAVE NEW REGULATIONS? (Drivers/reasons)

FALLS ARE THE BIGGEST KILLER IN THE WORKPLACE

SO

OBJECTIVE OF THE REGS IS TO CONTINUE TO REDUCE FATAL/MAJORS ACCIDENTS (Deliver Public Service Agreement [PSA] targets)

OTHER REASONS

EXISTING PIECEMEAL LEGISLATION/SINGLE SET OF REGS

Will consolidate existing requirements into one place making life easier for dutyholders.

Some sectors eg Agriculture were previously not covered other than general HSWA duty

Ag,cons, workplaces, docks, arboriculture, railways, nuclear, HID etc all covered.

CENTRE PIECE OF HSC FALLS FROM HEIGHT PROGRAMME

All working towards a common goal. Falls from height is a priority topic in the INJURY REDUCTION PROGRAMME

DIRECTIVE

Falls from height 2003/04

	All Falls	Low Falls	Average All Falls 1999 to 2004
Fatal	67	6	65
Major	4340	2330	4865



FALLS CONTINUE TO BE A BIG PROBLEM WHICH NEED TO BE TACKLED

2003/04

67 DEATHS ACROSS ALL SECTORS TO ALL WORKERS (Average 65)

TOTAL ACCIDENTS 235. THEREFORE FALLS ACCOUNTS FOR 28% OF ALL FATALS (Joint highest with transport)

67% OF FATALS IN CONSTRUCTION WERE FALLS

AGENTS INVOLVED IN FATAL ACCIDENT (Ladders 13, roofs 8 and scaffolds 6)

SECOND BIGGEST NUMBER OF MAJORS BEHIND SLIPS AND TRIPS

NB OVER HALF OF MAJORS WERE DUE TO LOW FALLS

The Directive

- The Regulations implement the 2nd amendment to the Use of Work Equipment Directive (89/955/EEC)
- The amendment is known as the Temporary Work at Height Directive (2001/45/EC)
- Directive implemented in the UK as The Work at Height Regulations 2005



The original UWED was implemented by PUWER92

The 1st amendment (AUWED) was implemented by PUWER98 and LOLER

There are therefore important links between existing provisions and the WAHR

Developing the Regulations

- 4 years in the making
- Consultation document
- Second Consultation



4 YEARS

Discussions with stakeholders, meetings etc.

CONSULTATION DOCUMENT (CD)

Dec 2003 to April 2004. 750 responses to CD raised challenging issues **hence delay** particularly AA sector.

SECOND CONSULTATION

Nov/Dec 2004 concerned the 2 metre rule for construction

HSC wants fit for purpose Regs even if this misses the EU implementation date

(Should have been implemented in July 2004)

HSC Set regulatory objectives

- Maintain existing standards
- Goal setting/sensible risk assessment

CONSEQUENCES

- WAHR consolidate existing duties
- No significant change to the way WAH risks are expected to be managed
- No significant changes to the way WAH is inspected or enforced



A HSC SET REGULATORY OBJECTIVES WHICH WERE,

- 1. MAINTAIN EXISTING STANDARDS INCLUDING THOSE IN CONSTRUCTION**
- 2. GOAL SETTING/SENSIBLE RISK ASSESSMENT**

HSC strategy is to introduce goal setting Regs which are **flexible enough** to apply to all industries and activities. Precautions should be in **PROPORTION** to the risk

B CONSEQUENCES

- C HOWEVER THERE ARE SOME NEW REQUIREMENTS AND KEY MESSAGES covered in the next few slides**

THE NEW REGS ARE FLEXIBLE ENOUGH TO ALLOW DEVELOPMENTS IN EXPECTED STANDARDS OF COMPLIANCE.

Eg AN INCREASE IN LOW FALL ACCIDENTS DUE TO A PARTICULAR CAUSE. An increase in expectations regarding standards of compliance can be accommodated by the new Regs because duty holders must act where there is a risk of a fall causing injury.

ALSO, THE REGS ARE ABOUT CARRYING OUT WORK AT HEIGHT, ISSUES RELATING TO DESIGNERS DESIGNING PROJECTS ARE AND WILL BE ENFORCED USING REG 13 OF CDM REGS. WAHR ARE NOT PLACING MORE ONEROUS DUTIES ON DESIGNERS.

Ladders

- Encourage the appropriate use of ladders
- Ladders not banned



APPROPRIATE USE OF LADDERS

NEED TO ENSURE LADDERS ARE USED IN APPROPRIATE CIRCUMSTANCES. Need to assess the risk and think about alternatives.

LADDERS ARE OFTEN USED BECAUSE THEY ARE READILY AVAILABLE, EASY TO USE AND TRANSPORT. THEY ARE OFTEN THE EASY WAY RATHER THAN THE RIGHT WAY TO DO A JOB. THEY ARE OFTEN NOT THE MOST SUITABLE ACCESS EQUIPMENT FOR THE JOB. (More on this later)

Key messages

- Those following good practice for work at height now, should already be doing enough to comply
- Those who plan and organise work at height and follow risk assessments will generally already comply
- Those following the hierarchy for managing risk from work at height namely avoid, prevent or mitigate risks will already comply
- Those choosing the right equipment for the job will already comply



BUILD ON EXISTING GOOD PRACTICE

Requirements are not new and reflect existing good practice in construction and other sectors.

PLANNING AND ORGANISING WORK AT HEIGHT

Those who think carefully about precautions needed for WAH and carry out risk assessments will already comply

THE HIERARCHY

Those familiar with the hierarchy Avoid, prevent mitigate the fall, will already comply (More on this later)

CHOOSE THE RIGHT WORK EQUIPMENT

Use **collective measures to prevent** falls (guard rails and working platforms) then **personal fall prevention** (work restraint) then **collective fall mitigation** (nets and airbags) then **personal fall mitigation** (fall arrest systems)

More on these later

Repeals/revocations

- Some Requirements covering work at height in W(HS&W)R and C(H,S&W)R are revoked
- Falls into dangerous substances in Workplace Regs remain
- Section 24 of Factories Act which deals with teagle openings is repealed
- FFH in Shipbuilding Regs has gone
- Docks and Fishing vessels Regs revoked apart from specific requirements to fence dangerous edges



REQUIREMENTS IN WHSWR & CHSWR

WHSWR Reg 13 (1) to (4) revoked. (**NOT ALL PARTS**, eg Reg 12 and 15 covered later)

CHSWR Reg 6 to 8 which deal with falls, fragile materials and falling objects are revoked plus parts of schedules dealing with falls.

Shipbuilding Regs 7 to 10 and 12 to 30 have gone.

NB (See Schedule 8 for revocations)

Falls (No 2 metre rule)

- All work at height is covered regardless of what height it is performed (No 2 metre rule)
- Precautions needed where there is a risk of injury
- Use risk assessment to decide whether precautions are needed and in what form
- Precautions are expected above 2 metres but also assess risks from falls below this height and take sensible precautions which reflect the risk



CONSTITUTES A MAJOR CHANGE FOR SOME

MOVE AWAY FROM THINKING HIGH AND LOW FALLS. THINK ALL FALLS AND TAKE PRECAUTIONS WHERE THERE IS A RISK OF INJURY FROM ANY FALL

NO 2 METRE RULE

Reference to 2 metres in ACOP to W(H,S&W)R not carried over.

Any fall height needs common sense to be applied to determine whether there is **a risk of injury** and whether precautions are needed

FACTORS TO CONSIDER IN RISK ASSESSMENT

HEIGHT higher the fall more likely to injure

SURFACE sharp edges, impalement risk etc may justify precautions

EXPECTED PRECAUTIONS (Inspection/enforcement policy)

ABOVE 2 METRES, PROTECTION FROM FALLS IS EXPECTED AND IN 9 TIMES OUT OF 10 THIS WILL BE GUARDRAILS

BELOW 2 METRES, ASSESS RISK, TAKE PRAGMATIC APPROACH.
Sensible precautions which reflect actual risk

**CHALLENGE ANY CULTURE THAT THINKS NO RISKS EXIST
BELOW 2 METRES**

Consultation over the 2 metre rule

- Pressure from some parts to retain the two metre rule
- Second consultation exercise carried out as a result
- No consensus so HSC decided on a risk based approach and sensible precautions which are reasonably practicable for the circumstance



Constitutes no lowering of standards

REASON FOR WANTING IT RETAINED

Some parts of the construction industry perceived it as a lowering of standards to remove the 2 metre rule so they lobbied. Concerned that fall prevention (guard rails) would no longer be mandatory for work at 2 metres or above. Resulted in 2nd consultation.

2nd CONSULTATION

No consensus

HSC DECISION

Not having a 2 metre rule is a progressive step which favours sensible risk assessment and sensible precautions.

CONSEQUENCES

Standards should be maintained and improved, not reduced because falls from ANY height should be managed.

Low falls

- Employers need to tackle low falls
- Duty to prevent low falls is not new
- Consultation has shown that employers are concerned about workers safety below 2 metres as well as above it
- WAHR are an opportunity to revisit low falls
- WAHR advocates sensible risk assessment and pragmatic precautions



LOW FALLS (Below 2 metres)

Research has shown that 60% of all major injuries are caused by low falls below 2 metres

EXISTING DUTIES TO PREVENT LOW FALLS

Existed in the Workplace Regs and CHSWR but often ignored particularly in the construction industry.

Low falls cont.



- Working platform to the left of a printing machine
- Approx 1 metre high
- Work with back facing edges
- Risk of a fall onto sharp edges
- Guard rails required?
- Platform in front OK?

EXAMPLES WHERE PROTECTION IS REQUIRED FOR LOW FALLS

BACK FACES AN EDGE Workers at a control panel on a machine who work with their back to a 1 metre drop may need a guard rail at that position

ANOTHER EXAMPLE, NARROW PLATFORM on a pedestrian traffic route 1 metre high could result in falls and warrant a guard rail

1 METRE PLATFORM ABOVE RE BAR needs guard rail due to impalement risk

EXAMPLES WHERE PRECAUTIONS MAY NOT BE NEEDED

LOW TRESTLE eg 1 metre high, with grass surface below, may justify no fall prevention/protection as risk of injury is unlikely

KNEE HIGH KICK STOOL warrants nothing other than stool being stable, good condition etc

Low falls cont.



Need open edge to facilitate the landing of goods

Edge protection therefore not reasonably practicable

However guard rail would be a sensible precaution for the steps and corner to the left of the steps as this is where close approach is more frequent?

Also designate loading platform edge with bright line, is a reasonable precaution.

Summary of main requirements of WAHR

- Organise and plan work at height (Reg 4)
- Avoid risk from work at height (Reg 6)
- Select suitable work equipment to perform work at height (Reg 7)
- Fragile surfaces (Reg 9)
- Inspection of work equipment (Reg 12)



KEY FEATURE THROUGHOUT IS RISK ASSESSMENT

Compatible with FFH risk control indicators in the **TOPIC PACK** ie identify activities and precautions so that risk can be eliminated or minimised AND Ensure appropriate equipment is used and it is well maintained and inspected

New Requirements

- The HIERARCHY of
 - AVOID
 - PREVENT, or
 - MITIGATE FALLS from work at height
- also take additional measures



BRIEFLY EXPLAIN THE HIERARCHY

CONSIDERING THE HIERARCHY IS THE KEY PART OF THE RISK ASSESSMENT/DECISION MAKING PROCESS AS TO HOW TO WORK SAFELY (REG 6) (In conjunction also with REG 7, principles for the selection of work equipment)

Hierarchy is goal setting, **technology independent** and based on SFAIRP

Duty holder has to decide what is reasonably practicable for the task, it does not specify technology, its up to the duty holder to decide.

WHY INTRODUCE IT

-Gives structure to the thought processes for decision making

-Based on the CHSW hierarchy which construction sector are familiar with.

-Expands this notion to all sectors e.g. Workplace Regs. did not have a hierarchy

MORE DETAIL LATER

New requirements cont.

- When selecting work equipment must now consider risks entailed with
 - Installation
 - Use
 - Dismantling
 - Rescue (associated with work equipment chosen)



THIS IS A MAJOR NEW REQUIREMENT (REQUIREMENT OF REG 7)

THIS IS A GLOBAL APPROACH TO RISK ASSESSMENT

Should determine the choice of methods or work equipment to use

e.g. better to use a MEWP for a simple roof repair if it would otherwise put at risk 3 people to build a tower, drag up youngman boards and other work equipment in close proximity to fragile skylights in order to provide safe access for one person.

EMERGEINCIES AND RESCUE

eg When a fall arrest harness has deployed, how are you going to rescue the person before suspension trauma becomes a problem?

Also how are you going to rescue someone from a net?

New Requirements cont.

- Some new terms and concepts
- Take into account weather conditions
- Guard rail heights to increase to at least 950mm for construction work (CHSW 910mm)
- Toe boards heights should be suitable and sufficient
- Some new technical requirements in the schedules



TERMS

Existing place of work, collective protection, fragile surface. All explained later.

WEATHER

To be taken into account when planning work e.g. adverse wind speeds

GUARD RAIL HEIGHTS

Non construction need to be of sufficient dimension to prevent the fall of any person. More on this in the Schedules section.

TOE BOARDS

No 150 mm min as was the case in CHSW. **Now** need to be suitable and sufficient. **Why?** because some MEWPS have 100mm which would otherwise be illegal in construction work.

SCHEDULES

e.g. more specific requirements for scaffolding, collective fall arrest and personal fall protection systems. All dealt with later when the schedules are covered.

Application (Reg. 3)

- Employers, self employed, employees and others
- Contractors
- Employers in charge of premises where work at height is carried out
- Those in control of people at work, to the extent of their control



EMPLOYERS SENDING WORKERS TO OTHER SITES

Covered by the duty under WAHR to organise and plan work and also the MHSWR to co-operate and co-ordinate with other employers to ensure risks associated with WAH are controlled.

EMPLOYERS SENDING EMPLOYEES WITH WORK EQUIPMENT TO WORK AT HEIGHT AT OTHER SITES

Must ensure the work equipment complies with WAHR (inspection requirements) as do the host employers.

Application cont.

- Do not apply to normal shipboard activities by a crew unless third parties are at risk on ship or quayside
- Apply offshore
- Very unlikely to apply to domestic householders
- Duty holders need to protect MOP's
- Do not apply to adventure activities



SHIPS

Does not apply to ship board activities under the direction of the master (providing it doesn't affect third parties). But does apply in ports. (The Regs apply in ports and at sea for the **navy**)

OFFSHORE

Apply to offshore activities within territorial waters ie **rigs** apart from Reg 11 danger areas which is covered by existing offshore Regs.

DOMESTIC HOUSEHOLDERS

Could apply in rare cases where there is evidence of employment (Eg property developer) **The reference to WAHR applying to domestic duty holders in INDG401 has been removed. (drafting error)**

MEMBERS OF THE PUBLIC

Legal opinion is that WAHR cover MOP's protection so long as matters are within the control of the duty holder eg prevent MOP's falling Reg 6(3) or being struck by falling objects Reg 10.

ADVENTURE ACTIVITIES

Employed instructors or leaders for caving or climbing are covered by HSWA & MHSWR. When not engaged in climbing, caving or similar activities, AA providers will be required to comply with WAHR eg during maintenance of climbing walls or other work at height at a centre.

Guidance

- INDG 401 'The Work at Height Regulations 2005 : A brief guide'
- Operational Circulars
- Training presentations on the HSE website
- Industry will be encouraged to produce own guidance with input from HSE
- Construction Sector have produce a Q & A briefing.



(<http://www.hse.gov.uk/construction/pdf/fallsqa.pdf>)

- WAH section of HSG150 will be updated

INDG 401

Is a **plain English guide** and general Q & A briefing

Aimed at SME's. Consists of a brief overview of the main requirements.

HSC MADE THE DECISION NOT TO PUBLISH DETAILED GUIDANCE/ACOP BECAUSE

1. REGS DON'T CONSTITUTE FUNDAMENTAL CHANGE
2. WIDE RANGE OF ACTIVITIES AND SECTORS MEANT IT WOULD BE DIFFICULT TO PRODUCE A DOCUMENT THAT MET ALL NEEDS
3. GOOD INDUSTRY SPECIFIC GUIDANCE IS AVAILABLE MUCH OF WHICH WILL STILL BE RELEVANT. HSE WILL WORK WITH STAKEHOLDERS TO ENCOURAGE MORE
4. WILL PROMOTE GOOD PRACTICE THROUGH THE FALLS PROGRAMME AND WILL USE TOOLS SUCH AS THE WEBSITE

OC

To be produced by Safety Unit (SU) and Construction Division Technology Unit (CDTU)

ALSO

Guidance on the safe use of ladders.

Some existing hardware guidance still relevant

Construction Q&A available on construction website under live issues

Enforcement of WAHR

- Business as usual
- Sensible pragmatic precautions
- More on enforcement in case studies

Part 4

- Gutter cleaning
- Skip loading
- Inspection



BUSINESS AS USUAL

No relaxation of enforcement from day one where there are existing duties but progressive approach where duties are new (except for flagrant deliberate breaches)

SENSIBLE PRAGMATIC PRECAUTIONS

Want practical precautions in proportion to the risk

Enforcement cont.

- Follow the topic inspection pack for falls from height
- Improvement Notices available for,
 - Identifying work at height and ensure appropriate precautions
 - Inadequate precautions at open edges
 - Are ladders suitable for the work?
 - Marking fragile roofs



TOPIC PACK

Topic pack contains guidance, IEE etc including standard IN's

Improvement Notice (IN), IDENTIFY WORK AT HEIGHT AND ENSURE APPROPRIATE PRECAUTIONS

Covers the duty to organise and plan Reg 4, Reg 6 risk assessment process and Reg 7 selection of appropriate work equipment.

IN, INADEQUATE PRECAUTIONS, OPEN EDGES

Reg 6 prevent falls

ARE LADDERS SUITABLE?

Reg 4,6 and 7

MARKING FRAGILE ROOFS

Reg 9

OTHERS

Managing contractors and Prohibition Notice's (PN) for no precautions on fragile roofs, other roofs, dodgy scaffolding.

ENFORCING AUTHORITY BOUNDARIES ARE STILL THE SAME

HSE will do all construction work and construction work carried out on/in LA enforced premises by persons who don't normally work there ie contractors doing work on external parts or segregated parts within LA enforced workplaces.

LA do work carried out by employees of LA enforced premises

Further information

- Policy/application
 - HSE Safety Unit
 - Specific sectors
- Technical issues
 - Safety Group
 - Construction Division Technology Unit



LA's contact enforcement liaison officer (ELO)

Reassurance for duty holders

- Do they follow current law and industry good practice?
- Do they assess risks, plan the work and act accordingly?
- Do they consider avoidance first then fall prevention and mitigation?
- Do they consider collective before personal protection?



If yes, they should be able to comply

These Regulations are not onerous, they require a proportionate response and there is no intention to over Regulate.

COSTS

Low for those who already comply. Potentially high for others.

Finally

- The objective is to reduce falls from height
- Ladders not banned
- Walking up and down stairs is not a WAH issue (Slip&trip)
- Cabin crew in an aircraft are not working at height!



REDUCE FALLS

Sensible precautions

LADDERS

Ensure they are appropriate for the task

But this is covered



Where a person could fall a distance liable to cause personal injury

The Work at Height Regulations 2005 (WAHR)

Part 2 Definitions



Overview of this section

- Definitions
- Examples of application



Definitions given now to help you navigate your way through the Regulations

Definitions

- Work at Height
- Existing place of work
- Working platform
- Collective protection measures
- Personal protection measures
- Appropriate ergonomic conditions



Fragile surface

Definitions for different types of fall protection systems such as rope access. Work positioning, fall arrest are covered in part 5, schedules

Definition of work at height

- Work in any place from which a person could fall a distance liable to cause personal injury
- Includes access and egress except by a staircase in a permanent workplace
- Includes work at or below ground level
- Does not include slips and trips on the level



DOES NOT INCLUDE SLIPS AND TRIPS ON THE LEVEL (This is covered by slip and trip program not FFH)

A FALL FROM HEIGHT HAS TO INVOLVE A FALL FROM A HIGHER LEVEL TO A LOWER LEVEL

KEY MESSAGE

There is no minimum height requirement. Risk assess all work activities where there is a risk of injury from falling.

CONSTRUCTION

Assessing all fall heights should be nothing new. However it is recognised that they were often ignored due to the reference to 2 metres in CHSWR.

What is work at height

- Any work at height using work equipment e.g. MEWP, tower scaffold, ladder, kick stool
- Work on a roof, vehicle, machine, plant, fabrication, ship, tree, telegraph pole
- Working next to an excavation, cellar opening, mine shaft
- Using harnesses, rope access, cradles
- Standing on a chair/table to change a light bulb



EMPHASISE

Work at height is anywhere where there is a risk of injury if measures required by the WAHR were not taken.

What is not work at height

- Work on the upper floor of an office where there is no risk of a fall
- Sitting on a chair
- Using permanent stairs if there is no maintenance or structural work going on
- Opening a window if there is no risk of falling



Construction or demolition work in an office such as an internal strip and refurbishment, would not be work at height if there were no fall risks eg no floor openings or open edges.

Reg 15 Workplace Regs is still in place so use this to address risk of falls in relation to windows, skylights ie ensure windows etc can be opened safely (eg poles) and where there is a danger of falling, ensure the window can't open too far to allow this.

Work at height where we would not normally get involved

- Railway staff standing on a platform edge (painted line sufficient)
- Librarian using a kick stool to retrieve a book from a shelf
(Kick stool well maintained, training given to ensure no overloading or overreaching)
- Actors performing on a stage
(Lighting to designate the stage edge)
- Lollipop person standing next to the kerb
(No risk of personal injury from a fall)



COVERS SITUATIONS WHERE THERE IS A LOW RISK OF INJURY AND OR IT IS NOT REASONABLY PRACTICABLE TO PREVENT FALL OR MITIGATE THE EFFECTS OF A FALL AND ADDITIONAL MEASURES CAN BE TAKEN TO FURTHER REDUCE THE RISK INCLUDING INSTRUCTION AND TRAINING AND SAFE SYSTEMS OF WORK

TAKE A PRAGMATIC APPROACH, proportionate risk based response

ACTORS/PERFORMERS (EXPECT EDGE PROTECTION ON A STAGE BEING SET UP)

AVOID DANGERS OF OVER IMPLEMENTATION. (eg insisting on harnesses being worn on a fully compliant working platform) **DO NOT INTERVENE WHEN YOU WOULD NOT HAVE DONE ANYTHING BEFORE THE INTRODUCTION OF THE WAHR** (except possible low falls issues which perhaps were overlooked before)

Where there is obvious low risk or acceptable risk do not intervene

More examples Police horse riders, motorbike couriers (covered by training)

Existing place of work

- Used in the Reg 6 hierarchy
- Means an existing building or permanent structure including its means of access and egress from which there is no risk of a fall occurring
- Does not require the use or addition of work equipment to prevent a fall



A EXISTING (SAFE) PLACE OF WORK WILL HAVE EXISTING (PERMANENT) FALL PREVENTION MEASURES SUCH AS GUARD RAILS OR A PARAPET

NO FALL FROM HEIGHT RISK WILL BE PRESENT AT AN EXISTING PLACE OF WORK

KEY CONCEPT: YOU DO NOT HAVE TO DO ANYTHING TO MAKE THEM SAFE BECAUSE THEY ARE ALREADY SAFE

IMPORTANT THAT A DUTY HOLDER UNDERSTANDS THE CRITERIA FOR AN EXISTING (SAFE) PLACE SO THAT THEY CAN IDENTIFY IT AND JUSTIFY USING IT FOR WORK AT HEIGHT WITHOUT HAVING TO IMPORT ADDITIONAL WORK EQUIPMENT TO MAKE THE PLACE SAFE

(REMEMBER, AN EXISTING PLACE OF WORK CAN BE TRANSITORY – IF CIRCUMSTANCES CHANGE AND A FALL CAN OCCUR, IT IS NO LONGER AN ‘EXISTING PLACE OF WORK’)

Existing (safe) place of work



UPPER ROOF AREA

Has existing guard rails so no additional work equipment needs to be brought in. Access to the roof and work on the roof can be carried out safely using an existing place of work.

FOREGROUND

Has no existing edge protection so work equipment would be required to make it safe. Notice also the presence of fragile skylights which would require protection.

Examples of existing (safe) places of work

- A non fragile roof with a permanent parapet or guard rail
- A machine, silo, storage tank, plant etc with fixed guard rails
- Mezzanine floor with edge protection
- Parts of a demolition or construction site where work equipment is not needed to make a working position safe because there is no risk of a fall



Machine, silo etc would be non mobile ie permanent.

There are examples in part 3 of more existing places of work

Existing (safe) places of work



Mezzanines, silos, plant, tank etc. Have existing fall protection

Requirements for existing places of work

- Stable and sufficient strength and rigidity
- Sufficient dimension to allow safe work and passage of persons and materials
- Suitable and sufficient means for preventing a fall
- No surface gap through which persons or material could fall
- SFAIRP prevent
 - slips trips,
 - persons being caught between it and adjacent structures
 - inadvertent movement during work at height



REQUIREMENTS ARE COVERED BY SCHEDULE 1

Covers requirements for existing places of work INCLUDING means of access or egress at height

USE SCHEDULE 1 WHEN MAKING A JUDGEMENT TO DETERMINE WHETHER AN EXISTING (SAFE) PLACE OF WORK EXISTS AND CAN BE USED AS A SAFE PLACE OF WORK FOR WORK AT HEIGHT.

Working Platform

- Working platform means any platform used as a place of work or as a means of access to or egress from a place of work
- Includes any scaffold, cradle, MEWP, trestle, gangway and stairway, roof



MUCH WIDER INTERPRETATION IN WAHR

Does not include ladders but does include mobile ladders with platforms and stepladder treads.

Working platforms continued

- Can also include
 - A guarded working platform
 - An unguarded working platform where fall mitigation is provided
- Think of it as the 'suitable surface' that you work off



A GUARDED WORKING PLATFORM

Complies with schedule 2 and 3 eg tower scaffold, MEWP, etc

WORKING PLATFORM WITH FALL MITIGATION

Complies with schedule 3 but has no fall prevention so also complies with schedule 4 or 5 eg roof or other edge with work restraint, air bags, nets etc to minimise the distance and consequences of a fall.

THIS WILL BE A NEW CONCEPT IN THAT A WORKING PLATFORM IS NOT JUST A TRADITIONAL PLATFORM WITH EDGE PROTECTION

(THE CONCEPT OF THE REGS REQUIRES YOU TO WORK FROM A 'SUITABLE SURFACE' TO WHICH YOU THEN APPLY 'FALL PROTECTION'. THE WORKING PLATFORM BECOMES THE SUITABLE SURFACE

A working platform does not necessarily have to be work equipment but it will need work equipment to make it safe if it is not and existing place of work. It will need fall prevention or fall mitigation measures.

When is a working platform safe

- When you can't fall off it or through it!!
OR,
- When measures are taken to mitigate a fall from it
- A hay stack, roof, top of a vehicle or a tree could be a safe working platform if it is used in conjunction with work equipment which will minimise the distance and consequences of a fall if there is a risk of injury from a fall



PREFERENCE IS FALL PREVENTION

Prevent a fall by using guard rails or using other work equipment that has guard rails e.g. MEWPS, tower scaffolds etc which prevent a fall

IF THIS IS NOT REASONABLY PRACTICABLE

Use work equipment in association with a working platform which provides fall arrest e.g. nets, airbags, bean bags, harnesses etc to mitigate the effects of a fall.

DUTY HOLDER HAS TO MAKE AN ASSESSMENT

1. DOES HE HAVE A SAFE EXISTING WORK PLATFORM (ROOF, MACHINE PLATFORM WITH EDGE PROTECTION)
2. DOES HE NEED TO IMPORT WORK EQUIPMENT IN TO MAKE A SAFE WORKING PLATFORM OR UTILISE A READY MADE WORK PLATFORM eg MEWP (To prevent a fall)
3. IF 2 IS NOT REASONABLY PRACTICABLE DOES HE NEED TO IMPORT WORK EQUIPMENT IN TO ENSURE FALL MITIGATION EG FALL ARREST NETS, AIRBAGS ETC

Traditional guarded working platforms




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Has edge protection

Notice misuse of MEWP? Sitting on and straddling guard rail. Bad practice, competence/supervision issue.

Unguarded working platform



STILL SAFE BECAUSE THE WORKING PLATFORM IS BEING USED IN CONJUNCTION WITH A WORK RESTRAINT SYSTEM

Worker cannot reach the edge so he can't fall off it and the working platform is of suitable strength and stability etc. so he can't fall through it. (This is a personal fall prevention system)

Unguarded working platform



STILL SAFE AND ACCEPTABLE

Despite no edge protection, workers are safe because it is being used in conjunction with air bags. (collective fall mitigation)

CONSEQUENCES ONLY

Are being minimised.

WORKING PLATFORM STILL COMPLEIES WITH SCHEDULE 3

ie suitable and sufficient strength, dimensions, suitable surface (no gaps) and will not collapse.

Collective protection measures

- An assembly of components or equipment which provides fall protection for all persons working at a position
- They are generally passive systems
No action required by the user such as adjustment, alteration or operation after installation by any user
- Examples of collective fall prevention



Guardrails, mezzanine safety barriers

Examples of collective fall mitigation

Nets, Airbags

PASSIVE SYSTEMS

The user does not have to take any action to benefit from their protection. Personal systems eg fall arrest harness need to be put on, adjusted and connected. They are active systems.

EXAMPLES

Collective fall prevention guardrails, MEWPS, scaffolds etc should be provided before Collective mitigation ie nets airbags. More on this later.

Collective protection measures cont

- Consider collective protection before personal and give them priority (Reg 7)
- Benefits
 - Protects all at risk at work area,
less onerous training, inspection,
maintenance, supervision etc
- Schedule 2 covers requirements for collective fall prevention, Schedule 4 collective fall arrest



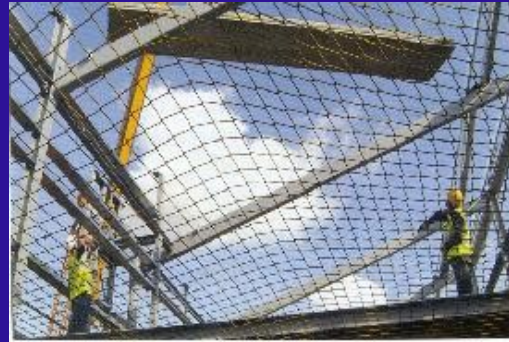
Collective fall prevention



Leading edge guard rail system

Safety barrier at a mezzanine floor FLT goods landing. Provides continual edge protection for all.

Collective fall mitigation



NOTE. NETS AND AIRBAGS CAN ONLY BE CONSIDERED ONCE COLLECTIVE FALL PREVENTION HAS BEEN RULED OUT

Place as close to the working level as possible to minimise fall height

Airbags and nets if placed more than 2 metres below working level, need to be justified on the basis of risk assessment. (eg. capable of coping with the fall height etc.)

Personal fall protection systems

- An assembly of components or equipment to protect the individual whilst working at height (including gaining access/egress from the working position)
- Generally active Systems
Require some action on the part of the user to be effective such as donning, adjusting, clipping on etc



Can provide Work restraint (fall prevention) and fall arrest (fall mitigation)

Personal fall protection systems cont.

- Examples
fall prevention, work restraint, work positioning, fall arrest, rescue systems and rope access
- Disadvantages over collective
Protects only the user, more onerous training, inspection, maintenance etc

Personal fall protection systems cont.

- Note a multi-user standing line system (work restraint, work positioning or fall arrest system) will always be a personal (active) system because each individual has to clip onto it for the system to be effective
- Covered by Schedule 5



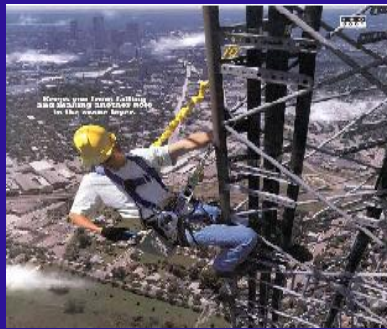
Not considered to be Collective Protection even though more than one person is on it because each individual has to clip on so its active protection.

Possible components of a personal fall protection system



Harness, Inertia reel, energy absorbing lanyard

Examples of personal fall protection systems



1. Work positioning
2. Fall arrest

Both are personal fall protection systems

More on these and other personal fall protection systems later

Appropriate ergonomic conditions

- Used in association with existing places of work Reg 6(4) and Reg 9(1) Fragile surfaces
- Means the work position should have characteristics including dimensions which are appropriate to the nature of the work being carried out
- Allows the person to adopt the correct work position or posture for the work in hand



Includes allowing passage without risk
Working platforms, policy is no less than 600 mm wide

NO UNDUE STREACHING OR OVERREACHING etc

Also implied in Reg 7 (Selection of work equipment) Schedule 1 (Existing place) and schedule 3 (Working platforms)

WORKING PLATFORMS

There is no legal minimum width unlike CHSW, pragmatic approach needed. Policy is to maintain the traditional current minimum width of 600 mm for working platforms unless there is sufficient justification for a smaller width.

Not this



Tower would provide better ergonomic conditions ie sufficient space and dimensions, no overreaching or overbalancing etc

Or this



More like this



Work can be conducted without undue discomfort

Fragile surface

- Means a surface which would be liable to fail if any reasonably foreseeable loading were applied to it
- Includes asbestos cement sheets, skylights etc
- Other examples include bridged material in silos, crusted surface of sludge lagoon



Covered by Reg 9

WHY HAS THE TERM CHANGED FROM FRAGILE MATERIALS IN CHSWR TO FRAGILE SURFACE?

ANSWER. Covers wider things which can be encountered in non construction sectors eg bridged materials in silos, crust on a sludge lagoon

Fragile surface



Glass skylights also Asbestos cement sheets and plastic roof lights

Unsafe system of work IP fell 10 metres through and survived! More on fragile surfaces later