



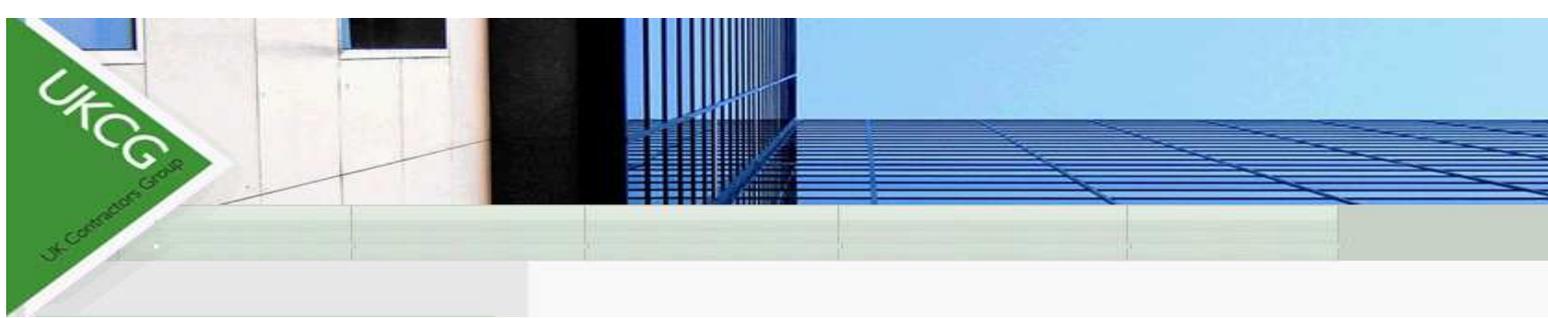
UKCG Mobile Elevating Work Platforms



Good Practice Toolkit

www.ukcg.org





Contents

Foreword

Reference Material

Initial Considerations

Planning and Preparation for MEWP Activities

MEWP Selection

Ground Conditions, Temporary Works and Supporting

Planning for Specific Risks - Anti Entrapment / Secondary Protection Devices

Specific Risks - Lifting and Handling Materials

Operator Competence

Operator Fitness for Work

Familiarisation

Emergency Arrangements

Taking Delivery of MEWPS

Inspections

Correct Use of Safety harnesses

IPAF Incident Database

Glossary of Terms

Foreword

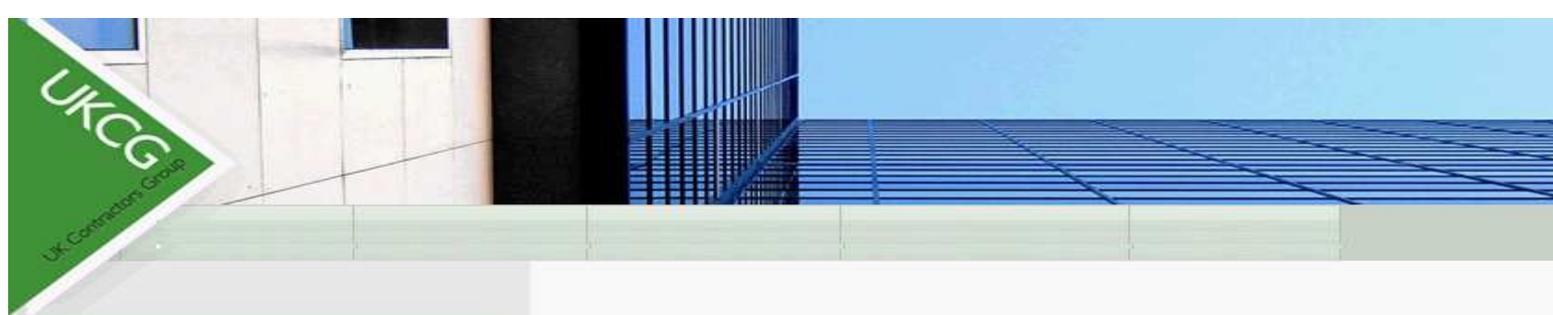
There are over 60,000 Mobile Elevated Work Platforms (MEWPs) in the UK market.

They are commonly used across all industrial sectors by a wide variety of trades as a safe temporary method of working at height.

Their popularity and range of applications has grown with their size, complexity, controls and functionality varying depending on the category, manufacturer, model and size of machine.

The purpose of this document is to provide guidance on how UK Construction Group [UKCG] Members will manage and permit the use of Mobile Elevating Work Platforms [MEWP] on their sites.

Although this document will cover legal compliance, procedure, statutory regulations and HSE guidance, it is likely that in addition to these elements individual UKCG Members may have additional or higher requirements, therefore, this document should be seen as a minimum standard for specifying, managing and operating MEWPs on site.



Reference Material

In addition to providing this Toolkit UKCG Members, their Supply Chain and MEWP Operators should make themselves familiar with the MEWP guidance, in particular that published by the Health and Safety Executive [HSE], International Powered Access Federation [IPAF] and Strategic Forum for Construction Plant Safety Group [SFPSG] for example:

- http://www.ipaf.org/fileadmin/user_upload/documents/en/MEWP_BPG_2010.pdf
- http://www.ipaf.org/fileadmin/user_upload/documents/en/MEWPBPG2010Part2.pdf
- <http://www.hse.gov.uk/pubns/cis58.pdf>
- <http://www.hse.gov.uk/safetybulletins/workplatforms.htm>
- <http://www.cpa.uk.net/sfpsg/#MedicalFitness>
- <http://www.ipaf.org/en/publications/technical-guidance-notes/>
- <http://www.ipaf.org/en/publications/risk-assessment/>
- <http://www.accessindustryforum.org.uk/>

Initial Considerations

The decision to specify the use of a MEWP should not be adopted simply for convenience but should be the result of a thorough planning and selection process considering typically:

- Has the plan of work considered an alternative to working at height?
- Can working at height be designed out?
- Can working at height be reduced in scope?
- Can the programme of works wait for permanent or easier access?
- Is there an alternative method of access that reduces the overall risk?
- Have the alternatives been considered, risks assessed and residual risks compared?

Where a MEWP is used the UKCG member will ensure, so far as is reasonably practicable, that MEWP operations are appropriately assessed and the risks including their level are identified with controls and constraints clearly communicated to any user of the MEWP. The UKCG Member will ensure, so far as is reasonably practicable, that site teams properly understand the risks and essential controls required to plan and coordinate MEWP Operations, and will where appropriate provide their staff with appropriate and relevant training, such as MEWP for Manager (IPAF) or equivalent.

If the use of a MEWP remains the considered preference, the following UKCG Minimum Standards should be complied with.

Planning and Preparation for MEWP Activities

On every site where a MEWP is used by a UKCG Member or their supply chain the UKCG Member should provide a named person with sufficient authority, for planning and preparation. They should be available to the site team when MEWPs are in operation but may not be resident on site. A 'MEWP for Manager' training course (e.g. IPAF or equivalent) is available for people who manage work activities.



UKCG Members shall normally require all their supply chain companies who are specifying MEWPs to appoint a named person who is involved with the selection and management of MEWPs. A 'MEWP for Manager' training course (e.g. IPAF or equivalent) is available for people who manage work activities.

Note : this person is to be involved in the process but may not be resident on site.

MEWP Selection

In seeking the right MEWP for any task, the following factors need to be considered:

- The nature and complexity of the work to be carried out
- Any access restrictions in the work area including any overhead obstructions during delivery, use and collection
- The terrain and ground conditions, including slopes, constrictions and how the MEWP will manoeuvre safely
- Work area conditions including maximum load bearing capacity of the ground / location and maximum force exerted by MEWP tyres/tracks/outriggers
- Number of people, equipment and the load to be lifted - taking into consideration any Material Handling Attachments



'Unsuitable ground conditions for selected MEWP'

- Height and outreach required
- Potential wind effects including operating internally or in partly clad / open structures
- Fuel type / emissions and the environment in which the MEWP will be operating
- The availability of suitably trained operators for the selected machines
- Emergency / rescue arrangements.

Ground Conditions, Temporary Works and Supporting Structures

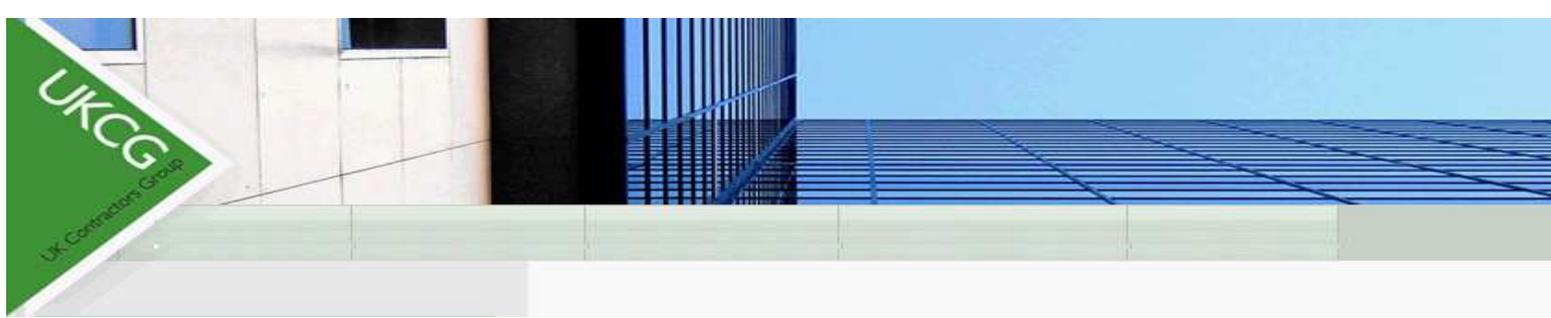
It is the Principal Contractor's responsibility to ensure that the ground conditions including supporting structures and traffic routes are suitable for the loads to be imposed by the MEWP and associated equipment, attachments, materials, personnel etc.

Prior to work commencing on site the UKCG Member will ensure, so far as is reasonable practicable, that the contractor selecting the MEWP is provided with relevant details of ground bearing capacity and load bearing capability of supporting structures including the location of any service ducts, chambers, restrictions etc.

The Contractor shall provide details of the intended imposed loads etc to the UKCG Member who will satisfy themselves that these are within the capacity of the ground / supporting structure including any temporary works.

During the MEWP operation the Contractor shall cooperate to ensure that the imposed loads do not exceed those capacities.

The UKCG Member in cooperation with the Contractor shall monitor the ground conditions etc. as appropriate to identify any deviation from the planned loadings or any ground movement, deflection of the temporary works / supporting structure.



The Contractor's operatives will ensure that wherever they identify poor ground conditions etc they do not operate the MEWP, and report their findings to the UKCG MEWP Manager.



'Example of unsuitable ground conditions'

- http://www.ipaf.org/fileadmin/user_upload/documents/en/GroundConditions.pdf
- <http://www.twforum.org.uk/>

Where necessary for the type of MEWP selected, the Contractor shall provide appropriate equipment to accommodate the loads where necessary e.g. spreader plates and their operators must ensure that these are deployed.

IPAF
INTERNATIONAL POWERED ACCESS FEDERATION

**SPREAD THE LOAD
SPREADER PLATE READY RECKONER**

Check maximum permissible jack leg force. This can be found in the specific machine operator manual.

Gross vehicle weight (Tonnes):

kN	daN	tonnes (t)	lbs (t)	kg (t)	dyn
0	0	0.00	0	0	0

If maximum jack leg force as shown in manual is higher than above, select a larger machine size with a maximum jack load equivalent or greater to that in the manual. Load bearing force is calculated at 80% of gross vehicle weight but some vehicles may be greater. Please check the specific machine operator manual.

Identify your ground conditions and then follow the colour coded boxes to identify the minimum recommended spreader plate size required for the selected vehicle.

For a general description of ground conditions please [CLICK HERE](#)

High Grade More than 400kN/m ²	Medium Grade 250-400kN/m ²	Low Grade 100-250kN/m ²	Too Soft Less than 100kN/m ²
0 m ²	0 m ²	0 m ²	0

BELOW ARE THE MINIMUM RECOMMENDED SPREADER PLATE SIZES IN MILLIMETRES (mm)
Spreader plates should be of suitable strength and appropriate material to prevent distortion and spread the load evenly.

0 dia	0 dia	0 dia	0 dia
0	0	0	0

'Example of load spreading equipment selection tool'

- <http://www.ipaf.org/en/resources/spreader-plates-campaign/>

Planning for Specific Risks - *Anti Entrapment / Secondary Guarding Devices*

All 3b MEWPs operated on UKCG sites should normally be fitted with a CE marked 'secondary guarding' Device / System (to minimise the risks associated with Entrapment) where a device is available to the industry for the selected MEWP.

The Contractor will select the most appropriate Device / System for the risks associated with the tasks to be undertaken supported by a suitable risk assessment.

Where the Contractor is able to demonstrate by risk assessment to the UKCG named competent person (see page 4) that the risks associated with entrapment are most appropriately controlled by means other than a secondary guarding Devices / Systems, or the risk of entrapment is minimal, the need for an additional Device / System not being required will be agreed between both parties.



'Examples of some of the devices / systems'



Note : When selecting a CE marked 'secondary guarding' Device / System the Contractor should refer to the "Strategic Forum for Construction : Avoiding Trapping / Crushing Injuries to People in the Platform, Section 6 – Best Practice Guidance for MEWPs document.

- http://www.ipaf.org/fileadmin/user_upload/documents/en/Guidance%20on%20Selectio%20of%20Anti-Entrapment%20Devices%20for%20MEWPs.pdf
- <http://www.cpa.uk.net/p/MEWPS-and-Overhead-Crushing/>

Specific Risks - *Lifting and Handling Materials*



Where materials are lifted to height, a specific risk assessment is required to identify how such equipment will be raised / lowered safely.

Where material / equipment is carried that extends beyond the confines of the MEWP basket / platform the material / equipment should be secured using a CE marked and compatible material handling device.

Where the material has a large surface area the maximum rated operational wind speed of the MEWP should be reduced to compensate for the increased wind resistance "sail effect" the material may impose.

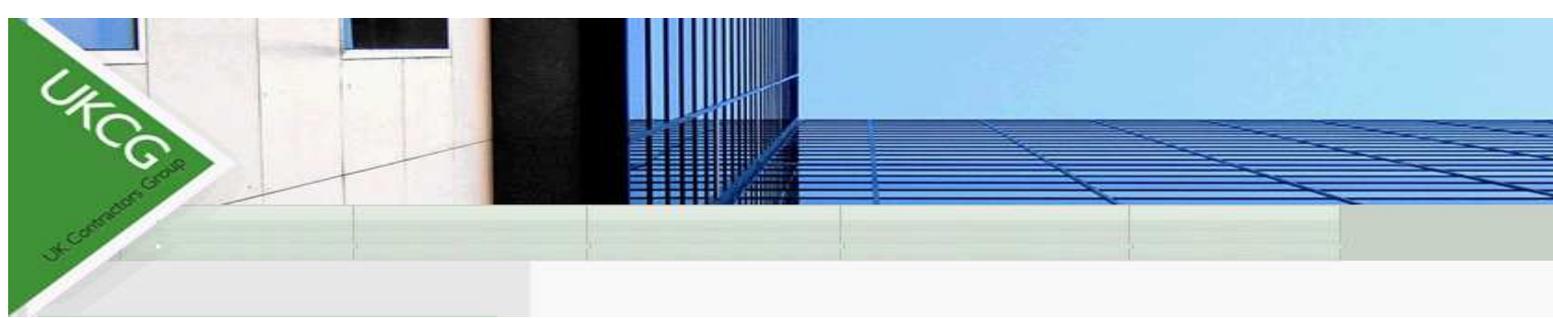
The Contractors named competent person (see page 4) should review such selected devices to ensure they are suitable for the MEWP / task.

The effect of imposed loads on the MEWP, ground, supporting structure and temporary works shall also be considered.



Note : When selecting a CE marked 'material handling' Device / System the Contractor should refer to the "Strategic Forum for Construction : Avoiding Trapping / Crushing Injuries to People in the Platform, Section 6 – Best Practice Guidance for MEWPs document.

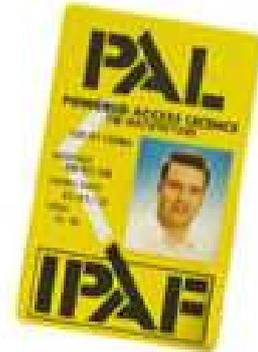
- http://www.ipaf.org/fileadmin/user_upload/documents/en/Guidance%20on%20Selection%20of%20Anti-Entrapment%20Devices%20for%20MEWPs.pdf



Operator - Competence

All Operators of any MEWP shall hold, as a minimum, the IPAF PAL or CPCS qualification for the appropriate category of MEWP.

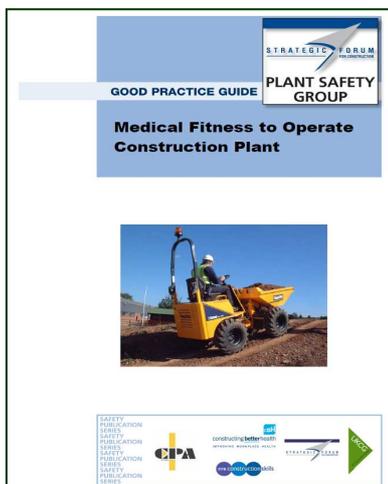
Trades such as Safety Netters, Steel Erectors and their associated trades working on a UKCG project **must** hold the PAL+ qualification or a CPCS 'Experienced' Operators Competence Card.



Note: In the event of any new entrants / trainees needing to gain experience prior to obtaining the PAL+ qualification, the worker may operate a MEWP on site but only when supervised [in the basket] by a PAL+ / CPCS 'Experienced Competent' operator.

- http://www.ipaf.org/fileadmin/user_upload/documents/us/AWP_BPG_2010.pdf
- <http://www.citb.co.uk/training-courses/plant-operations/mobile-elevating-work-platforms-mewps-ipaf/>
- <http://www.ipaf.org/en/training/palplus/>

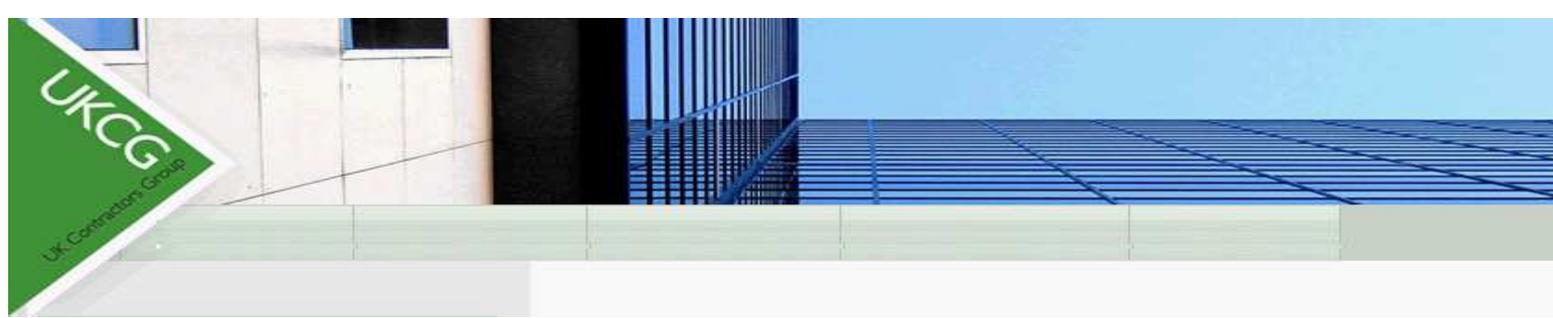
Operator and Users – 'Fitness to Work'



It is the responsibility of the employer of the MEWP operator to satisfy themselves of the medical fitness of the Operator for the environment and potential work position.

Guidance on Operator Fitness to Work is available from the SFPSG.

- <http://www.cpa.uk.net/sfpsg/#MedicalFitness>



Familiarisation



All MEWP operators should hold a Log Book or similar record that can be used by the Operator to record / demonstrate experience of the particular machine to be used.

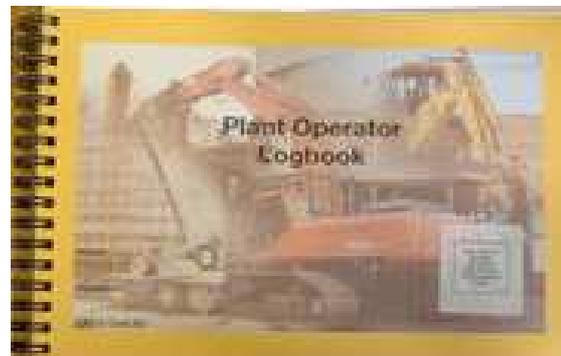
If the Operator cannot demonstrate previous experience with a particular MEWP then that person must undergo a familiarisation procedure before commencing work.

Familiarisation should be a planned event with sufficient time allowed for it to be effective. It must take place in a safe environment and should be conducted by a trained and nominated person from:

- the hire company, or
- site management, or
- contractors supervisor

Note: A competent operator can self-familiarise using the operator manual.

Prior to commencing work the UKCG Member will, so far as is reasonable practicable, ensure that appropriate familiarisation has taken place.



An entry should be made into the Operators 'Log Book' recording such familiarisation.

- http://www.ipaf.org/fileadmin/user_upload/documents/en/F10807.pdf

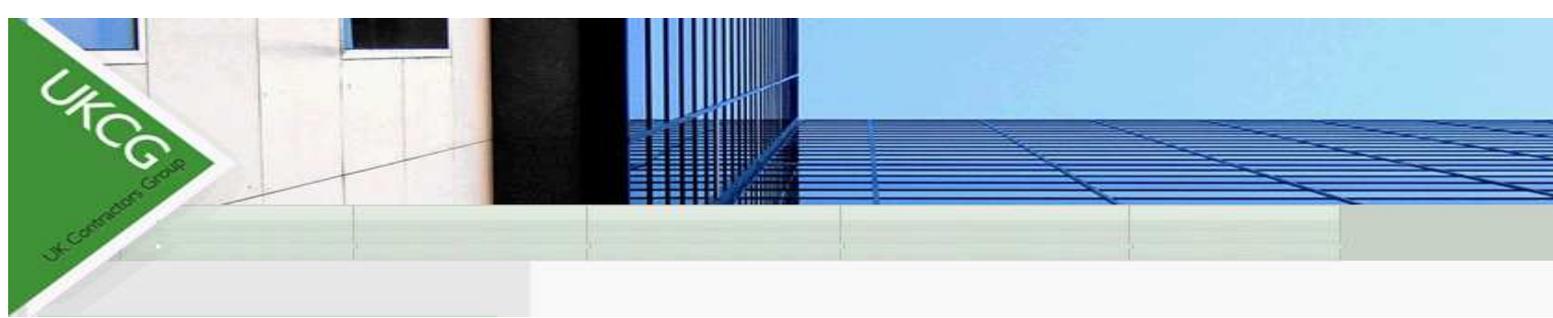
Emergency Arrangements

The UKCG named competent person (see page 4) shall ensure that an appropriate rescue plan is incorporated in the emergency arrangements and that rescue practice / rehearsals are carried out at appropriate intervals and recorded.

It is important that Emergency Rescue briefings are undertaken with the users of the specific MEWP by the Contractor.



- http://www.ipaf.org/fileadmin/user_upload/documents/en/RescuePlan.pdf



Taking Delivery of MEWPS

Delivering / collection, loading / offloading of MEWPS will be in accordance with the Project Traffic Management arrangements including the requirements for marshalling and banking.

The same precautions are required whether un/loading on the highway / off-site or on the construction site.

MEWP movement to and from work areas must be undertaken in a controlled manner.

The delivery company shall also have suitable procedures for the loading and off-loading of equipment including how the delivery driver will be protected from falls when working at height.



Any MEWP arriving at site shall have:

- valid report of thorough examination (this could be held on a web portal etc. but must be accessible to the UKCG named competent person (see page 4)
- an operating manual for the MEWP

Inspections

Prior to using a machine the operator shall ensure that a pre-use inspection and function check of the MEWP is carried out and recorded.

MEWP PRE-USE INSPECTION CHECKLIST		MACHINE: _____		WEEK COMMENCING: _____																											
All checks should be conducted in accordance with the manufacturer's manual		MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY	SUNDAY																							
VISUAL CHECKS	Documentation	1 Current thorough examination certificate (within last six months)							2 Manufacturer's operator manual									3 Rescue plan													
	Wheels/tyres	4 Wheel security (nuts, retainers: loose, damaged, missing)								5 Tyre pressure (pneumatic, foam filled or solid)									6 Cuts, splits, exposed braiding, damaged rims												
		Engine/power source	7 Fluid levels (engine oil, coolant, fuel)								8 Fluid leakage on ground and around engine									9 Battery (electrolyte, security and charging plug condition)											
			Hydraulics	10 Hydraulic fluid level								11 Leaks (hoses, pipe connections, rams, cylinders)									12 Security and condition (cuts, chaffing, bulges)										
	Hoses and cables			13 Power track cable trays (free from damage and debris)								14 General condition, pins/retainers, footplate									15 Spreader plates (present, condition, secure for travel)										
		Outriggers, stabilisers	16 Interlocks (functioning, engaged)								17 General condition (damage, misalignment, corrosion)									18 Cracks in weld											
	Chassis, boom and scissor pack		19 Pins, retainers and chains (security, signs of wear)								20 Canopies, guards, engine covers (security and condition)									21 Steps for access/egress (secure, undamaged, clear)											
			Platform or cage	22 Entrance gate, guard rails and retaining pins								23 Harness anchor points									24 Clear of rubbish, debris and obstructions										
		Decals and signage		25 ID plate, safety, warning and information decals (legible)								26 Controls (identification decals, directional arrows)									27 Platform loads (SWL, max. wind speed, max. number of persons)										
	FUNCTION CHECKS			28 Security device (power isolator, keypad, smart card)								29 Function enable (ignition key, foot switch, hold to run device)									30 Emergency stops and emergency lowering system										
			Using Ground (G) and Platform(P) controls	31 All switches, function controls (move freely, do not stick)								32 Lifting functions (raise, lower, slew, tele-out, tele-in)									33 Travel functions (forward, reverse, steer, brakes)										
		34 Elevated drive speed (reduced or prevented)									35 Lights, beacons, warning devices									36 Alarms (tilt, descent and travel)											
		37 Limit switches (e.g. descent, load, outreach, rotation)									38 Pothole protection device (fully deploys and retracts)									39 Oscillating axle locks, extending axles											
		40 Accessories, power to platform, extending decks									41 Jacks-legs, stabilisers, outriggers, levelling devices																				

ALL FAULTS AND DEFECTS TO BE REPORTED IMMEDIATELY TO YOUR SUPERVISOR

Only persons who are trained and authorised by their employer should operate this equipment.

OPERATOR NAME(S) AND PAL CARD NUMBER(S): _____

'Example of an inspection checklist'

- http://www.ipaf.org/fileadmin/user_upload/documents/en/MEWPInspectionChecklist.pdf



The Operator should refer to the Operators User Manual or Hirers Guidance to determine the content of the pre use inspection / daily / weekly and statutory thorough examination (maximum 6 monthly).

The use of positive 'tagging' and / or key card controls should be considered and used as appropriate.



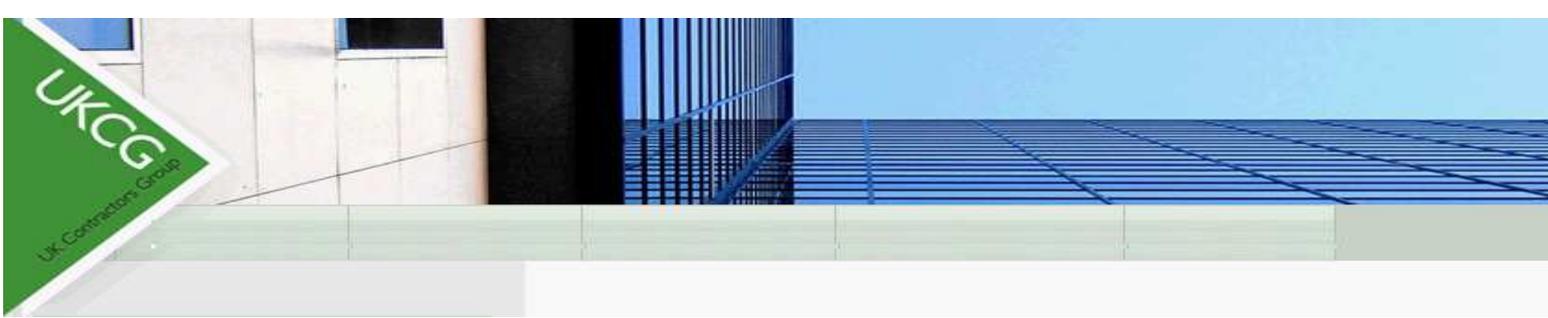
Correct Type of Safety Harnesses

When working within a boom type MEWP those within the MEWP Basket shall wear and attach, to the defined anchorage point, a full body harness with a restraint lanyard [adjusted to be as short as practicable].

The banner is split into two sections. The left section has a black background with a white rope and a metal hook, and the text 'Clunk lick' in a stylized font. The right section has a yellow background. It features a black silhouette of a worker in a harness on a platform. To the right of the silhouette, the text reads: 'Wear a full body harness with a short lanyard in boom type platforms'. Below this, in smaller text, it says: 'For full information about the correct use of harnesses in platforms, please obtain technical guidance note H1 from IPAF Tel: +44 (0)15395 66700'.

Note: Harnesses should not be attached when working over water.

- http://www.ipaf.org/fileadmin/user_upload/documents/en/CatapultLeaflet.pdf



IPAF Incident Database

It is the responsibility of the UKCG Member to ensure MEWP related accidents, incidents and near miss situations are uploaded onto the IPAF Accident Reporting Database.

Please contact us via email if you are having difficulties with the system. itsupport@ipaf.org



IPAF ACCIDENT REPORTING

Username

Password

SUBMIT [Forgotten Your Details ?](#)

Not Registered ?
 [Sign Up !](#)

The preferred way to report an accident is to register your details (above) and obtain a secure password to access the confidential reporting database.

If you are unwilling to register to use this reporting system, please click on the box below to inform IPAF of any fatal accident involving powered access equipment.

ANONYMOUS REPORTING

Welcome to the IPAF ACCIDENT Database

All manufacturers, rental companies, contractors and users are encouraged to report:

1. Any known fatal and serious accidents involving MEWPs/AWPs or MCWPs worldwide, and
2. Any known accidents involving MEWPs/AWPs or MCWPs in the UK.

Please register first in order to be able to report accidents on the database. Companies wishing to have multiple persons reporting accidents should appoint a nominated person (a senior person who will manage reporting).

This nominated person should register first in the company name.

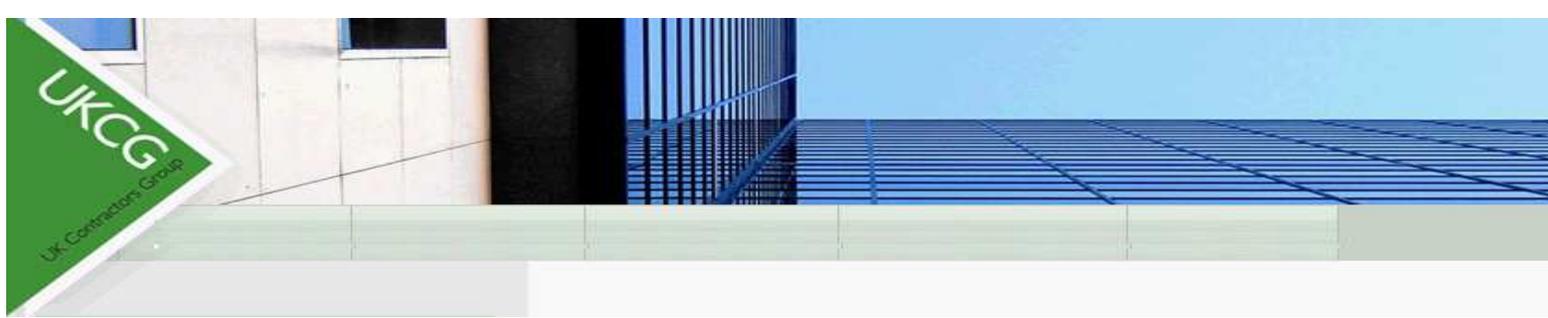
Once registered, the nominated person will be able to give others access to report accident on the company's central accident records.

Companies will thus be able to track their accidents and manage their records.

There is also a facility for those who wish to report a fatal or serious accident, but are unwilling to register use the preferred reporting system.

Information entered into the database will be kept confidential and will be used strictly for the purposes of analysis and improving safety.
Report accidents, and help save lives!

- <http://www.ipaf.org/en/resources/accident-database>



Glossary of Terms

UKCG / UKCG Member Company : The UK Contractors Group (UKCG) is the primary association for contractors operating in the UK. UKCG represents over 30 leading contractors operating in the UK on construction specific issues.

HSE : The Health & Safety Executive is the national independent watchdog for work-related health, safety and illness. HSE are an independent regulator and act in the public interest to reduce work-related death and serious injury across Great Britain's workplaces

IPAF : The International Powered Access Federation is a not-for-profit organisation owned by its members and promotes the safe and effective use of powered access equipment worldwide. Providing technical advice and information, through influencing and interpreting legislation and standards, through its safety initiatives and training programmes.

SFPSG : The Strategic Forum Plant Safety Group is an cross-industry group organised by the CPA (Construction Plant-hire Association). Its aim is to bring about a continuous reduction in the rate of injuries and ill-health caused through the operation and installation of plant in the construction industry.

PRINCIPAL CONTRACTOR : means the person / business appointed as the principal contractor under the Construction Design & Management Regulations.

CONTRACTOR : is any person / business (including a client, principal contractor or other person referred to in the Construction Design & Management Regulations) who, in the course or furtherance of a business, carries out or manages construction work.

MEWP : Any vehicle-mounted or self-propelled device, telescoping extendable or articulating, or both, which is primarily designed to position personnel.

CLASSIFICATION of MEWP : IPAF have the classification MEWP into the following categories which are as follows: 1a, 1b, 2a, 2b, 3a, 3b, insulated aerial device and specials.

CPCS : Construction Plant Competence Scheme provides a registration card scheme acknowledged by industry for those involved in plant operations by recognising skills, knowledge and understanding, competence and qualifications.

CPCS Experience / Competent Operators Card : The CPCS Experience / Competent Operators Card is issued by CITB to platform operators who successfully demonstrated a level of health and safety awareness, underpinning knowledge, operating ability and operating competence on the type of plant.

PAL Card : The Powered Access Licence Card is recognised worldwide across industries as proof of platform operator training to the highest standard. It is issued by IPAF to platform operators who successfully complete a training course at an IPAF-approved training centre.

PAL+ Card : PAL+ is an additional one day of category-specific training course aimed at operators working in higher risk or challenging environments.