



Safety in window cleaning using suspended and powered access equipment

HSE Information Sheet MISC611

Introduction

For every window cleaning job, the choice of access equipment will be determined by the height to be negotiated, site conditions, duration and extent of work and frequency of access. Cradles and mobile elevating work platforms are an ideal form of access for external window cleaning for many larger buildings.

Use of this type of equipment is one of the safest ways to clean windows, but things can still sometimes go wrong. This information sheet provides a series of checklists for window cleaning businesses so that they can reduce risks as far as possible. It has been produced in co-operation with the National Federation of Master Window and General Cleaners.

Suspended access equipment

Contractor checks

As a window cleaning contractor, you are responsible for ensuring that the workplaces you and your employees are going into are safe. In particular, you must be satisfied that the suspended and powered access equipment you're being given to use is safe.

Before you commence work or take up any contract, here are a few crucial matters you must check.

- Have the equipment's owners carried out their own risk assessment and recorded the findings on its use under the Management of Health and Safety At Work Regulations 1999 and the Provision and Use of Work Equipment Regulations 1998?
- Does the risk assessment cover all significant risks, including those brought about by the age of the equipment, its suitability for the work and the management and maintenance regimes?
- Is the risk assessment genuinely specific to that building or does it appear to be just a generic one?
- Does the risk assessment deal with emergency procedures, rescue, communications and breakdowns, eg can operators be manually winched up or down, can operators be retrieved back into the cradle after falling out?
- Has the suspended access equipment (SAE) been thoroughly examined and maintained recently?
- Have you seen a copy of the last Certificate of Thorough Examination and its last maintenance inspection? **If you haven't, do not use the SAE.**

- Is there a written or illustrated safe system of work for the equipment?
- Is there a system to authorise access to the equipment?
- Is there a suitable system of communication that takes emergencies into account, eg mobile phones?
- Are powered access users included in any emergency evacuation procedure for the building in the event of a bomb or fire evacuation?

Preliminary checks before use

Before you or your employees step onto a cradle or platform you must check the following:

- Is a written or even illustrated safe system of work or operational manual for the equipment accessible on-site for users at all times?
- Can the building's roof area be accessed safely or do you have to use a safety wire system to reach the SAE?
- Is it possible to access the SAE from a safe location? Operators must not have to climb over the edge of a building into a cradle, nor unhook any safety harness at any time once they are attached.

Before commencing any work activities you must check that the SAE is safe and appears to be in good physical working condition. Key points include:

- Are all safety devices operating correctly?
- Are all control buttons operating correctly and can the cradle be properly controlled?
- Are designated safety anchorage points provided on the cradle?
- Are there any physical signs of wear or damage?
- Is there any exposed electrical wiring?
- Are all electrical connectors good and secure?
- Are there dents or misalignment in any tracks or runways?
- Is the floor of the cradle damaged when viewed from both above and below?
- Are the ropes correctly reaved on the drum (if visible) and through pulleys?
- Are the ropes frayed, rusted or unlubricated?
- Are there any signs of extensive corrosion to the cradle, tracks or runways?
- For articulated equipment, check all connecting pins are in place by taking the load and inspecting the joints.

- Check all guard-rails by applying a short, sharp pull on them while outside the equipment.

Operation

The safe use of the SAE is essential and the following should be used as a checklist:

- Ensure that the operators have been fully trained in the use of all SAE (it is the responsibility of the window cleaning contractor to carry this out but they must be provided with suitable information on the use of the SAE by the equipment's owners, ie the building management).
- Ensure the safe working load is not exceeded – with both people and equipment.
- Ensure all tools and equipment taken into the cradle are secured, eg by suitable lanyards.
- It is a good idea to check that the cradle runs smoothly and that there are no faults by carrying out a number of ascents and descents prior to starting work. If there are any doubts about the mechanical worthiness of the equipment, do not use it.
- If the building's windows open outwards make sure the building's owner understands that people should not open windows while you are working. Always check for obstructions in the direction of travel.
- Never work outside the confines of the platform.
- Never alter the configuration of the equipment.
- Stop work and report any malfunctions that occur.
- Consider the weather conditions and do not operate if the wind speed is too high:
 - Has the manufacturer prescribed a maximum wind speed, eg 25 mph?
 - How is this to be measured?
 - Is there excessive rain or snow or has ice formed on the equipment?
- Prevent other persons approaching the SAE when it is being operated:
 - Has the area of operation been cordoned off?
 - Are warning signs posted?
 - Can operations be carried out at a different time outside normal working hours, eg at weekends?
- When work is completed, the SAE must be stored or garaged in accordance with local instructions:
 - Does the power have to be manually disconnected?
 - Does the SAE have to be secured on the roof with ties or straps?
 - Does the garage have to be secured and alarmed?

Personal protective equipment (PPE)

PPE will need to be maintained correctly and all operators trained in its safe use.

- Harnesses should be full-body with a means of connection to an anchorage point – do you use your own or are they provided? Are they energy-absorbing or inertia-reel? Each one must be suitable for its intended purpose and be subject to regular inspection by the provider under the Provision and Use of Work Equipment Regulations 1998.
- If lanyards feel gritty to touch or are damaged in any way, do not use them.
- Gloves and overalls should be provided to protect the operators from adverse weather conditions but should not restrict their movement unnecessarily.

Rigging cradles on the day

If you are involved in the use of cradles rigged on the day, as well as ensuring that you and/or your employees check all the matters referred to in the previous paragraphs with respect to permanently rigged cradle systems, all users must be properly trained in all the aspects of setting up the units correctly.

Do's and don'ts

Do:

- always wear a full-body harness with an energy-absorbing or an inertia-reel lanyard to the current BS EN standards;
- always attach the harness to a designated eyebolt or attachment point;
- always ensure that all tools have lanyards attached;
- always check the harness and other PPE is in good condition before using it.

Don't:

- use the SAE in adverse weather conditions, eg high winds, against manufacturer's or expert advice;
- access or leave the cradle other than at ground level or a designated safe access point;
- enter the cradle from over the parapet unless your harness can be attached to a secure anchor point;
- attempt any reckless or dangerous practices, eg rocking the cradle, dropping equipment to colleagues on the ground, taking friends 'joy riding';
- by-pass any safety device incorporated in any part of the system;
- overload the cradle beyond its safe working load (SWL), eg extra materials or people.

Mobile elevated working platforms (MEWPs)

- The equipment's owners must have carried out their own written risk assessment on its use under the Management of Health and Safety At Work

Regulations 1999 and the Provision and Use of Work Equipment Regulations 1998.

- People must not operate a MEWP unless they have been trained and authorised as competent or are undergoing formal training under close supervision. Training should be in accordance with a recognised scheme such as one run by the CITB or the International Powered Access Federation (IPAF).
- The responsibility for providing training lies primarily with the window cleaning contractor as the employer but they must be provided with suitable information on the use of MEWPs by the equipment's owners, ie the building management or hire company.
- The maximum number of people that may be carried on the platform and the safe working load should be clearly marked on the platform.
- Anyone using the MEWP's platform must wear a full body harness in good condition, with an energy-absorbing or inertia-reel lanyard to the current BS EN standards. Use of such equipment as a fall restraint system that prevents falls is currently most common. If fall arrest is used (to stop someone once they have fallen), then a properly rated anchor point is essential (most are currently rated only for fall restraint). The clearance height of the platform should also be considered because, when working below 5 m, an energy-absorbing style lanyard may be too long to stop someone's fall. In all cases consult the maker of the equipment on its suitability.
- A set of operating instructions must be available for use and reference whenever the MEWP is in use.
- The maximum permissible wind speed in which the MEWP may operate or remain raised/extended should be clearly specified.
- The maximum gradient on which a MEWP may operate should be clearly marked on the platform, and inclinometers should be provided to enable an operator to establish the slope of the ground.
- Stabilisers/outriggers should be provided with suitable soleplates for use on soft ground.
- Identify any localised ground hazards such as ducts, manhole covers, holes or voids.
- Ensure no parts of the MEWP can protrude into any areas where vehicles may strike the MEWP.
- The user of the MEWP should make use of information supplied by the manufacturer relating to the minimum supporting capacity of the ground needed by the MEWP and the site-specific risk assessment for the activity should take the nature of the working environment into account.
- The person(s) on the platform should be in control of all movements at all times. However if, as in the case of the road vehicle type of chassis-supported MEWPs, where horizontal-travelling controls are at ground level, then there should be a suitable system of communication between platform

personnel and the ground controller, eg two-way radios or an intercom system.

- Guard-rails at least 920 mm high, with mid-rails or mesh infilling, and toeboards at least 150 mm high, should be provided at the edges of platforms. Alternatively, solid enclosures at least 920 mm high should be provided. Access gates should not open outwards and should return automatically to the closed and fastened position; a vertically sliding section of mid-rail can also be an acceptable means of access.
- The upper surface of the platform should be made slip-resistant and adequate means of attachment for safety harnesses should be provided. Properly secured guard-rails may provide a suitable attachment point.
- Before being used for the first time on-site, MEWPs should be thoroughly examined by a competent person and a copy of that examination report should be made available to the hirer/user.

Travelling ladders and gantries

Travelling ladders and gantries are normally found running across large areas of glazed roofing and may be powered or moved manually by the operators and (as when using SAE or MEWPs):

- operators must be fully trained in the use of the equipment and the relevant safe system of work;
- PPE should include full body harnesses with lanyards and suitable footwear;
- work should not be undertaken in adverse environmental conditions, eg rain, ice or high winds;
- rescue arrangements must be in place should an operative fall.

Key elements to check on any travelling ladder or gantry system are:

- Can the task reasonably be carried out from the ladder/gantry, ie is over-reaching a possibility?
- Is there safe access to the travelling ladder/gantry?
- Does the travelling ladder/gantry lock in position when being used or can the control box be activated by unauthorised people when the operators are on it, eg consider trapped-key-operated controls?
- Does the vertical sliding eyebolt/fall arrest system lock in position if an operative falls?
- Are the operators using the ladder/gantry capable of moving it – does it need two or even three people to move it?
- Do operators need to be provided with double-lanyard harnesses when transferring from one ladder to another because there is no intervening place of safety?

Further reading

Inspecting fall arrest equipment made from webbing or rope Leaflet INDG367 HSE Books 2002 (single copy free or priced packs of 10 ISBN 0 7176 2552 4)

Management of health and safety at work. Management of Health and Safety at Work Regulations 1999. Approved Code of Practice and guidance L21 (Second edition) HSE Books 2000 ISBN 0 7176 2488 9

Safe use of lifting equipment. Lifting Operations and Lifting Equipment Regulations 1998. Approved Code of Practice and guidance L113 HSE Books 1998 ISBN 0 7176 1628 2

Safe use of work equipment. Provision and Use of Work Equipment Regulations 1998. Approved Code of Practice and guidance L22 (Second edition) HSE Books 1998 ISBN 0 7176 1626 6

Workplace health, safety and welfare. Workplace (Health, Safety and Welfare) Regulations 1992. Approved Code of Practice L24 HSE Books 1992 ISBN 0 7176 0413 6

Use of fall protection equipment with mobile elevating work platforms Miscellaneous Information Sheet MISC614 HSE Books

Further information

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For information about health and safety ring HSE's Infoline Tel: 08701 545500 Fax: 02920 859260
e-mail: hseinformationservices@natbrit.com or write to HSE Information Services, Caerphilly Business Park, Caerphilly CF83 3GG.

This leaflet contains notes on good practice which are not compulsory but which you may find helpful in considering what you need to do.

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