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# **Guidance on the Management, Control and Safe Use of Temporary Suspended Access Equipment (TSAE)**

## Disclaimer:

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### 1. SAEMA POSITION






SAEMA recommends that BS5974 should be referred to for all activities concerning TSAE. This standard is considered to be a basis for best practice. Failure to comply with BS5974 may result in a successful prosecution in any legal action







### 2 SCOPE

- 2.1 The principal aim of this document is to provide guidance to Hirers and operators of temporary suspended access equipment on how they can carry out their work in a safe, structured and orderly manner.
- 2.2 It should also help UAP's to better understand what is required of themselves and the users of the TSAE. Normally, users will be window cleaners, façade maintenance personnel or members of the company employed to install TSAE
- 2.3 A Temporary Suspended Platform (TSP) is a cost effective and safe form of access which is utilised throughout the construction industry.
- 2.4 The installation, modification, dismantling, and maintenance of TSAE should be properly planned, appropriately supervised and carried out in a safe manner.

### 3 REGULATIONS AND STANDARDS

#### 3.1. Other information relating to this document can be found in:

-  The Workplace (Health, Safety and Welfare) Regulations
-  The Management of Health and Safety at Work Regulations – particularly regulation 3(1)
-  Provision and Use of Work Equipment Regulations 1998 (PUWER98)
-  Lifting Operations and Lifting Equipment Regulations 1998 (LOLER 98)
-  BS5974– – Code of practice for Temporarily Installed Suspended Scaffolds and

- Access Equipment 2010
-  HSG150: Health and Safety in Construction
-  HSG33: Health & Safety in Roof Work
-  The Work at Height Regulations 2005
-  EN1808 – Safety requirements on suspended access equipment. Design calculations, Stability criteria, construction and testing.
-  BS8454 – Code of practice for the delivery of training and education for work at height and rescue.
-  HSG107 2013 Maintaining Portable Electrical Equipment

## 4 TERMS AND DEFINITIONS

- 4.1 UAP** - person appointed by the user with the training, practical and theoretical knowledge and experience needed to act on behalf of the user organization and have control of the management of the operation of the TSAE
- 4.2 TSAE** - suspended access equipment installed on a building or structure for specific task(s) and dismantled and removed from site on completion of the work for which they were installed
- 4.3 TSP** - suspended equipment from which the operator(s) works, including work cages and suspended chairs
- 4.4 Duty Holder** - designated person with management responsibility for the safe use, maintenance and thorough examination of suspended access equipment.

## 5 USER PPOINTED PERSONS RESPONSIBILITIES. (UAP)

- 5.1** The User Appointed Person (UAP) should act on behalf of the equipment user's organisation and in this instance he/she is the Duty Holder.
- 5.1.2** The UAP should have control of the management of the Temporary Suspended Access Equipment (TSAE).
- 5.1.3** The UAP should be familiar with the safe systems of work and have a thorough knowledge and understanding of the method statements, which should be prepared and issued by the hirer of the TSAE.
- 5.1.4** The UAP should have the responsibility for making sure that Safe Systems of work are implemented
- 5.1.5** It is the UAP who is legally responsible for ensuring that the TSAE is:
- Installed by trained and competent personnel.
  - Safe and fit for the purpose for which it was designed
  - Properly maintained and examined.
  - Used by adequately competent and trained operatives.
- 5.1.6** The UAP should note that they have legally required duties and responsibilities towards the TSAE and all those operatives who use it. Those duties and responsibilities are identified in PUWER 98, LOLER 98 and in BS5974 .

**Ignoring these documents leaves the Duty Holder in peril of prosecution under health and safety legislation.**

**Note:** The identity of the UAP must be established before any work commences and is defined for the purpose of this document as a *‘Designated person with Management Responsibility for the safe use, Maintenance and Thorough Examination of the TSAE Equipment’*.

## 6. HEALTH & SAFETY

- 6.1. The UAP is legally responsible to ensure that a risk assessment for the use of TSAE is carried out.
- 6.1.1 The Risk Assessment should include the access routes to and from the TSAE and take into account the surroundings, ensuring that all hazard control measures are implemented.
- 6.2. Only adequately trained and competent persons shall use suspended access equipment.
- 6.3. All operators of TSAE shall wear and use the appropriate personal protective equipment (PPE).
- 6.4. Although one person can operate some types of suspended access equipment, for safety reasons operators will frequently be in teams of a least two people. On all installations, the size of the team should be appropriate to the task and the risk to be undertaken.
- 6.5. It is the responsibility of the UAP to ensure that there is a suitable "Rescue Plan" in place prior to the commencement of works in a TSAE.

**Note:** For Guidance in the preparation of a rescue plan see SAEMA Document No. SDN 14001

## 7. PERSONAL PROTECTIVE EQUIPMENT (PPE)

Where there is a risk of falling the UAP shall ensure that ALL Operators use a full-body safety harness, with an appropriate lanyard or inertia reel system, which is attached to a designated anchor position, at all times

*Note Other appropriate PPE, which may include a safety helmet, gloves, boots, luminous jackets etc. as may be deemed necessary by the Risk Assessment provided by the UAP or a Specific Site Safety Officer.*

## 8 REPORTING TO SITE

### 8.1 Operations

- 8.1.1 Upon reporting to site, ensure the relevant equipment and/or documents as required, in the risk assessment and method statement are in the possession of the UAP responsible for the Operatives who will be using the TSAE.
- 8.1.2 The following may also be required:
  - ✕ Work permits.
  - ✕ Access door keys or passes
  - ✕ Equipment keys
  - ✕ Anemometer
  - ✕ A copy of any Emergency procedures in case of malfunctions of the TSAE.
  - ✕ Communication Devices
  - ✕ A handing over certificate confirming that the TSAE has been inspected in accordance with regulations and is "Fit for the Purpose".
- 8.2. Obtain from the UAP or a representative of Management of the company hiring the TSAE any further information that may affect the safe use of the equipment and update the Risk Assessment.

**NOTE:**

This is especially the case if there has been any change to site specific hazards that may not been identified in the method statement or risk assessment.

## 9. COMMUNICATIONS

- 9.1. Communications can be either by voice, intercom, radio, hand signals or mobile phone. An assessment should be made at the time to decide which form of communication is the most suitable for the specific operation of the TSAE.

Taking into account various factors into consideration such as:

- ✂ Common language understood by the UAP, Installers and the Users of the TSAE and any Third Party who may be called upon to effect an Emergency Rescue of the users.
- ✂ Wind carries away the sound of voices
- ✂ Rain might damage sensitive equipment
- ✂ Bright sunlight impairing vision of intended observers of hand signals
- ✂ Some Hospitals do not allow the use of mobile phones on the premises
- ✂ Radio signals may be blocked due to intervening buildings
- ✂ The MOD do not allow unauthorised radio transmissions
- ✂ The MOD might not allow the use of mobile phones
- ✂ Airside restrictions at airports

**Note:** The above list is not exhaustive

## 9.2. General communication checks:

- 🔊 Intercoms, where fitted – check that the sound is clear and audible
- 🔊 Two – way radios - should be in good working order, set to the same frequency and the batteries charged
- 🔊 Mobile phones – check that phones have a signal and are fully charged, and that everyone concerned has a list of all the relevant telephone numbers

## 10. PRE-USE CHECKS – (Off Site)

- 10.1.1. Prepare a site specific Risk Assessment (RA).
- 10.1.2. Prepare a site specific Method Statement (MS), ensuring that if any hazards exist they are noted and appropriately dealt with.
- 10.1.3. The UAP should ensure that a written “Rescue Plan” is in place and is available should it be required.

## 10. Pre-Use Checks – (On Site)

- 10.2.1. Ensure that all items noted in the RA and MS are noted and any specific measures noted in the RAMS are Implemented and that all the hazard control measures specified are in place.
- 10.2.2. Where it is not possible to implement the controls, consideration must be given to abandoning the use of the TSAE equipment, until such time as the controls can be implemented.
- 10.2.3. If additional hazards are noted these should be reported and no work should be undertaken until those hazards have been noted and added to the revised Risk Assessment appropriately dealt with.
- 10.2.4. The UAP must ensure that the operators have been instructed in the safe use of the equipment and have in their possession any other relevant documents e.g. operating manuals and that these have been read and understood by all the TSAE users.
- 10.2.5. Ensure that the TSP hoists and lifting gear have current LOLER reports as evidence of a thorough examination.  
**NOTE:** If these documents are not available, **DO NOT USE** the equipment
- 10.2.6. Ensure that the equipment to be used is not ‘Out of Service’. Any equipment that is not in service should have an ‘Out of Service’ notice prominently displayed on it, e.g. a Scaff-tag.
- 10.2.7. The equipment should not be used during adverse weather conditions, particularly high winds or electrical storms – check the weather forecast beforehand. *Note:* Lightning storms are particularly dangerous when using radios or mobile phones and TSAE should not be operated in these conditions

- 10.2.8.** Before commencing and during work, it is advisable to use an anemometer or other wind indicating device to check the wind speed. The safe wind conditions should be in the suspended access equipment's operating manual, or manufacturer's instructions.  
However, if none of those documents specify a safe wind speed, SAEMA recommends not to use the platform if the constant wind speed exceeds:

### **11 metres per second (25mph)**

Even though this is a recommended MAXIMUM speed, it might be that even this speed is too high.

- 10.2.9.** Operators should take extra care of funnelling effects (for example, between two buildings or plant rooms) and be particularly careful near roof edges and building corners, etc. where wind speeds can easily double.
- 10.2.10.** Check the working areas below the platform are clear and free from obstructions, e.g. vehicles, people, open windows and other equipment.
- 10.2.11.** "Men Working Overhead" signs and/or exclusion zones may need placing below the area of works. Do not forget access to the area from side doors, alleyways etc.
- 10.2.12.** Visually inspect and check all that the equipment is safe for use. Prior to use an inspection should be carried as per the daily checklist.

This Check List must include:

- ✗ A function test of the safety features of the TSAE
- ✗ A Check that the TSAE is complete and serviceable.
- ✗ Look for signs of corrosion, fatigue, damage, distress, dislodged items and overstrain, etc.
- ✗ Suspension ropes should be in good condition with no obvious signs of wear or kinking.
- ✗ Any daily checks recommended by the manufacturer.
- ✗ If the equipment is electrically powered, check that the RCD'S operate correctly.
- ✗ Any power cables and their connections etc. should have no obvious signs of defects.

**Note:** The above list is not exhaustive

## **10. Pre-Use Checks – (Immediately Prior to Use)**

- 10.3.1.** It is especially important that functional tests are carried out on the TSAE by the installer prior to it being taken into service and the relevant certification issued to the UAP
- 10.3.2** A handing over certificate should be produced by the installer confirming that the TSAE has been installed in accordance with BS5974 and is fit for the purpose. The certificate should detail the type and location of the TSAE and confirmation that it has been inspected by a competent person.
- 10.3.3** The TSAE when rigged and ready for use, should also be clearly marked in easily –readable letters and/or pictograms that include the following:
- a) The Rated Load limit in kilograms (kg) for the specified task;
  - b) The maximum number of persons (excluding materials) allowed to be on the platform.
  - c) Safety harness anchor points where fitted;
  - d) The name of supplier and contact details

## **11 RIGGING THE PLATFORMS**

A TSAE hirer/supplier will require a certificate of proof of competence from any user wishing to install, adjust or dismantle their equipment eg. Steeplejacks who are suitably trained and competent to install TSAE's.

- 11.1.** The installation of a TSAE is a hazardous operation and should only be carried out by competent and trained operatives. They should have the practical and theoretical knowledge and experience to install, adjust, maintain and dismantle the equipment.

Hazards to consider during the installation of a TSAE

- ✗ Hauling wire ropes up to or lowering them down from a suspension point

- ✗ Safe access to rigging points and hooks
- ✗ Operatives falling
- ✗ Operatives overreaching
- ✗ Dropping objects, e.g. hauling ropes or equipment (e.g. weights)
- ✗ Manual handling
- ✗ Weight of power cable and hauling rope
- ✗ Friction abrasion
- ✗ Cladding could cut rope (and cause damage to building)
- ✗ Swing hook adjacent to glass
- ✗ Incorrect fitting of safety hook to anchor point
- ✗ Crossing of the main and secondary suspension wire ropes

## 12. SAFE USE OF TEMPORARY SUSPENDED ACCESS EQUIPMENT.

- ✗ ALL users of TSAE should be competent and have been inducted by the Installing company on the proper use of the specific TSAE.
- ✗ Operate the TSAE as specified in the equipment operating instructions and as demonstrated by the installer.
- ✗ Always carry out a function test prior to the use of a TSP. Special attention should be paid to the safety features
- ✗ **Never overload a TSAE. The Rated Load will be clearly marked and this should never be exceeded.**
- ✗ Always access or exit the platform from a safe and/or approved place.
- ✗ Always "Tie in" the TSP into the building where this is practical to do so.
- ✗ Attach the hook/karabiner on the safety-harness lanyard to a designated PPE attachment point (if provided)
- ✗ Secure all loose items, perhaps by tethering them to the platform. Even the smallest of items dropped from a height can kill.
- ✗ The platform should remain on a safe surface until movement is required. Additional personnel may need to guide the platform's initial movements
- ✗ When operating the TSAE, be constantly aware of obstructions and projections from the building façade – for example, flagpoles, CCTV cameras, soil pipes, external staircases etc.
- ✗ Platforms can be "Fended Off" the building or around obstructions by pushing with the hands where necessary.
- ✗ Be aware of the risks associated with passing microwave antennas. Ensure that the antenna is switched off.
- ✗ Always use any façade restraints if provided.
- ✗ **DO NOT** leave a platform unattended where it could be misused or cause damage.
- ✗ Always isolate the power supply, remove any keys and secure the equipment after a work period to prevent unauthorised use or movement by wind and weather conditions.
- ✗ Lifting apparatus shall not be used from any part of the suspended access equipment unless specifically designed for the purpose.
- ✗ Adequate ventilation should be available to minimise the inhalation of carbon monoxide and other noxious gases (e.g. from vehicle exhausts). Do not work below street level. i.e. In shafts or tunnels unless adequate ventilation is supplied and a written rescue procedure in place.
- ✗ Confined Space Training may also be necessary depending on the nature of the work being undertaken by the TSAE Operatives.

**Note:** The UAP must advise the TSAE hirer and inform him if this is the case to ensure that any risk is recorded in the Risk Assessment and Method Statements for the project.

- ✗ In addition to the daily equipment checks it is the responsibility of the Duty Holder/UAP to ensure that the equipment is inspected at least once a week by a competent person to ensure that it continues to be safe for use as per the PUWER regulations. This is generally carried out by the competent installer but may be carried out by a person who has the required practical and theoretical knowledge of the equipment to be inspected.



## 13. BREAKDOWNS/MALFUNCTIONS

- 13.1.** As with all mechanical and electrical equipment, there is a possibility of breakdowns occasionally happening. **Note:** See SAEMA Document No. 14001 for guidance on Emergency Rescue Planning
- 13.2.** The installer should as soon as possible after the Breakdown/Malfunction record details of the breakdown/malfunction and ensure that the repair is completed by a competent person and visually examined, recorded and passed back to the UAP so that it can be taken back into service.
- 13.2.1.** The installer must ensure that both the UAP/Duty Holder receive a copy of Breakdown Report and the handing over certificate or engineers report sheet stating that the equipment has been thoroughly examined and is safe for use after the work described in **13.2** above is completed and that the equipment is now once again "Fit For Purpose".

## 14. REPORTING OF INCIDENTS

- 14.1** Within 14 days after any reportable incident or accident, the following information (under RIDDOR) must be reported to the enforcing authority. It is the employee's duty to inform his employer of any such event. The information required for the report is:
- Date, time and method of reporting of the incident
  - Personal details of those involved
  - Location of the incident.
  - Equipment being used
  - A brief description of the events
  - Weather conditions

## 15. WHEN LEAVING SITE

- 15.1.** Always isolate the power supply, remove any keys and secure the equipment after a work period to prevent unauthorised use or movement by wind and weather conditions
- 15.2.** Upon completion of the work being carried out from the TSAE the equipment should be made secure to:
- A) Prevent wind damage to the equipment of the TSAE and or the building and
  - B) Prevent unauthorised interference and use of the TSAE Equipment.

### **NOTE:**

The power supply should be isolated to ensure that the TSAE cannot be used by ANY unauthorised third party.