



Guidance Note on Mechanical and Electrical Breakdown, Rescue, and Rescue Planning for Suspended Façade Access Equipment

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1. Introduction

This document has been prepared to assist Duty Holders (e.g. facilities managers, building owners, main contractors, and any other persons responsible for temporary or permanently installed suspended façade access systems), all users of suspended façade access equipment, and those who may contract others to operate such equipment. Its purpose is to provide guidance to support appropriate actions and effective planning in the event of a mechanical/electrical breakdown or user incapacitation.

2. Terms and Definitions

The regulations and standards referenced during the preparation of this guidance note are listed below. This list is not intended to be exhaustive; additional regulations and standards may exist that provide further advice and should be considered when developing rescue plans for façade access equipment.

- **WAHR 2005:** *Work at Height Regulations 2005*
- **LOLER 1998:** *Lifting Operations and Lifting Equipment Regulations 1998 (LOLER)*
- **PUWER 1998:** *Provision and Use of Work Equipment Regulations 1998. Open learning guidance*
- **BS 6037-1: 2017:** *Planning, design, installation and use of permanently installed access equipment. Code of practice. Suspended access equipment.*
- **BS 6037-2: 2020:** *Code of practice for the planning, design, installation and use of permanently installed access equipment. Travelling ladders and gantries.*
- **BS 7985: 2013:** *Code of practice for the use of rope access methods for industrial purposes. Recommendations and guidance supplementary to BS ISO 22846.*
- **BS 7883:2019:** *Personal fall protection equipment. Anchor systems. System design, installation and inspection. Code of practice*
- **BS 8610:2017:** *Personal fall protection equipment. Anchor systems. Specification*
- **BS 17235:2024:** *Permanent anchor devices and safety hooks*
- **BS 8681:2024:** *Personal fall protection equipment. Anchor systems. Specification for provider competence*
- **BS EN 361: 2002:** *Personal protective equipment against falls from a height. Full body harnesses*
- **BS EN 358: 2018:** *Personal protective equipment for work positioning and prevention of falls from a height. Belts for work positioning and restraint and work positioning lanyards.*
- **BS EN 813: 2024:** *Personal fall protection equipment. Sit harnesses.*
- **HSE OC 282/31:** *Rope evacuation from mechanical handling equipment.*
- **City of London, Environmental Health:** *Working at Height - Emergency Rescue Planning Video.*

3. Duty Holder Responsibilities

Duty Holders have a legal responsibility to ensure that a suitable rescue plan is in place. Under the Work at Height Regulations 2005 (Regulation 4), all work at height must be properly planned, and this planning must include arrangements for rescue. This responsibility cannot be transferred to equipment users.

The equipment manufacturer should provide instruction regarding how to operate the manual control features required to recover the equipment in the event of an electrical breakdown or if a user becomes incapacitated. However, the rescue strategy remains the responsibility of the building's Duty Holder.

4. Equipment User Responsibilities

Equipment users must ensure that their Risk Assessment and Method Statement (RAMS) sets out how they will follow the rescue plan and minimise any remaining risks.

Equipment users should be trained and competent. Operator training for suspended façade access equipment should include:

- General work-at-height training
- Personal fall protection equipment training, including selection, inspection, fitting, and safe use of relevant equipment
- SAEMA Part 1 training

- Building specific practical training on the safe operation of the installed suspended façade access equipment, including but not limited to:
 - Safe access to and egress from the equipment
 - Overview of the equipment
 - Safety devices and pre-use checks
 - Operation of the equipment
 - Emergency procedures

5. SAEMA Position

The Specialist Access Engineering & Maintenance Association (SAEMA) recommends that the Duty Holder responsible for the upkeep of all the equipment that forms the façade access system on any specific building or structure should have a written rescue plan available on the site at all times. The person responsible for the employment of the users of the above-mentioned system must also be aware that a rescue plan exists and be aware of its location, should the need arise for a rescue procedure to be implemented.

SAEMA further recommends that all those involved in developing the rescue strategy complete SAEMA's Duty Holder Training to gain a clear understanding of their legal responsibilities and industry best practice.

6. Rescue Planning: High-Level Decision Flowchart

A flowchart, describing the rescue process for a typical suspended façade access system can be found in Figure 1. Further supporting information, to complement the flowchart, can be found in Table 1.

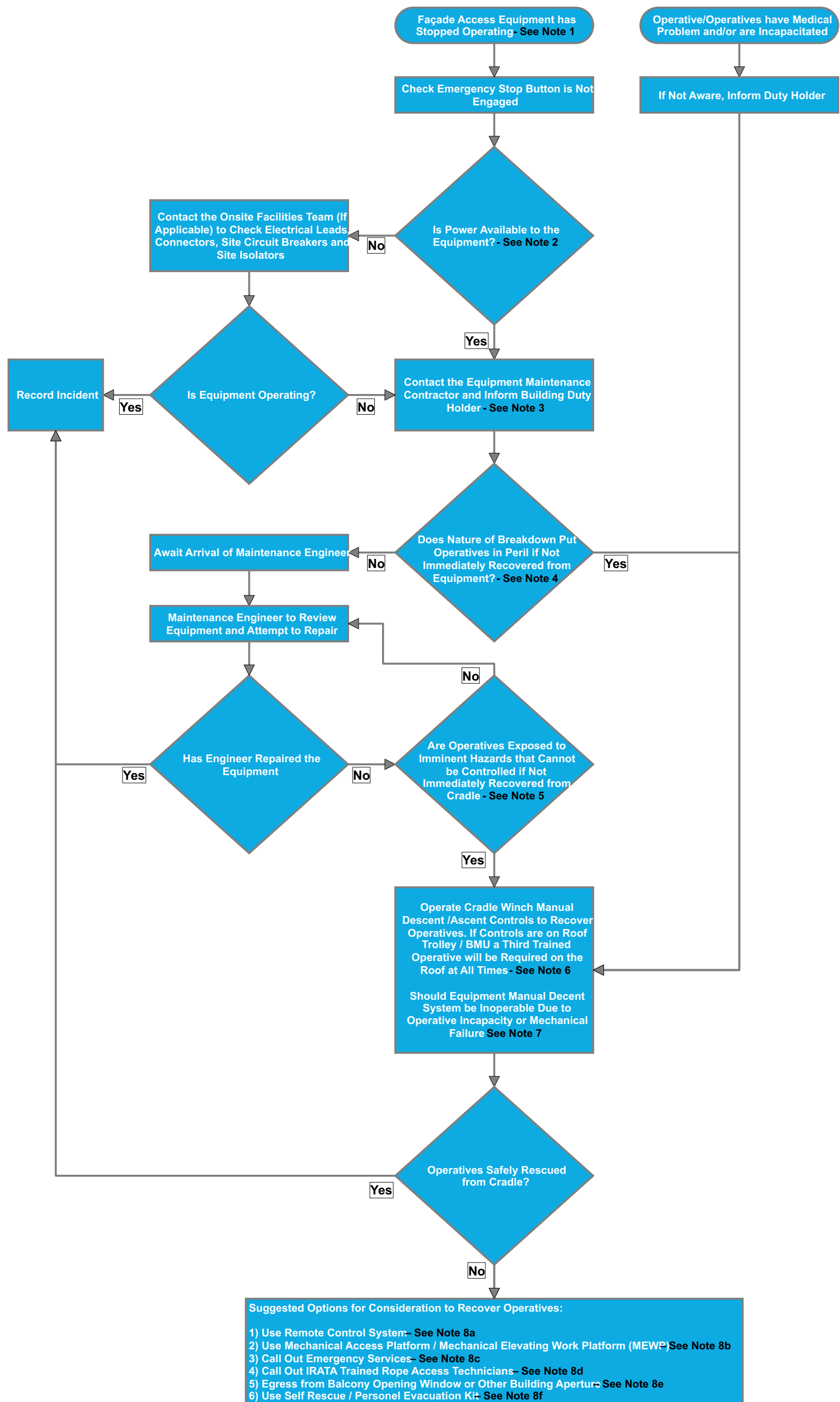


Figure 1 - Rescue Planning: High-Level Decision Flowchart

Table 1 – Further Information Supporting Flowchart

Note 1	Equipment Stopped Operating When equipment stops functioning, the cause is often minor or intentional — for example, the activation of a safety device. By following a methodical troubleshooting approach, trained equipment operatives on site can usually identify and resolve the issue.
Note 2	Loss of Power – Initial Site Assessment There are many types of Suspended Access Equipment, each differing in design and functionality. However, most systems are fitted with a power-indicator light on the front of the electrical control panel. If fitted, check that this indicator is illuminated. If the equipment has no power, inspect all connections to the building's electrical supply. Where possible, verify that the building power supply is still present. This should only be carried out by in-house personnel who are fully familiar with basic fault-finding procedures and/or are appropriately qualified to assess electrical power outages.
Note 3	Escalation When the Cause of Breakdown Is Not Immediately Identified If the cause of the breakdown is not immediately apparent, the maintenance provider must be contacted without delay. The Duty Holder on site must also be informed of the equipment failure, as the façade emergency rescue plan may need to be implemented.
Note 4	Duty Holder Assessment of Response and Need for Rescue The Duty Holder must assess whether the response time of the maintenance engineer is appropriate, taking into account the nature and severity of the breakdown. During this period, the Duty Holder should continue to monitor the situation. If they believe that the operative's situation is deteriorating, consideration must be given to implementing the emergency rescue plan.
Note 5	Assessment of Imminent Hazards The Duty Holder must consider whether the operatives are exposed to an imminent hazard that cannot be adequately controlled. In situations involving serious mechanical failure, rapidly deteriorating weather conditions, or where an operative requires immediate medical assistance, the Duty Holder should activate the emergency rescue plan without delay.
Note 6	Operation of Manual Ascent/Descent Systems Where necessary, manual descent or ascent procedures should be implemented. Power-operated suspended access equipment is required to incorporate a manual-descent facility for use during emergency rescue situations. Manual descent must only be carried out by trained and competent personnel, and only when it is confirmed that the platform can be safely lowered to a place of safety without increasing the risk to the operatives or to members of the public. In the majority of cases, the manual-descent system has proven sufficient to recover operatives safely. Note: • All equipment must be regularly maintained by a reputable and competent organisation, in accordance with applicable legislation. • Operatives must have received suitable and sufficient training specific to the equipment they are required to use.

	- Operatives must complete full pre-use checks of the Suspended Access Equipment before starting work, following the manufacturer's instructions. This must include checking the manual-descent system. - Roof-rescue operative: While façade access equipment is in use, a third party trained in the equipment's rescue procedure must be present on site to support emergency operations.
Note 7	Alternative Rescue Solutions To prepare for the unlikely scenario in which the manual-descent system is inoperable, or where the operative(s) become incapacitated, an alternative rescue method must be available. Several potential rescue options are outlined in Note 8a-8f; however, each may carry significant implications. When considering any alternative rescue method, you must ensure that no unacceptable risks are introduced. Selecting the most appropriate rescue option requires a structured risk-assessment process, which must be completed as part of the overall rescue planning.
Note 8a	Use of Remote Controls to Recover Operatives Some equipment may be fitted with controls that allow the cradle or platform to be operated remotely. These controls can be used to raise or lower the platform to a safe position in order to enable the rescue of the user. This may be necessary, for example, if the operative(s) inside the cradle have become incapacitated. Note: A trained third party must operate the remote-control system when control from within the cradle has been lost, in order to safely recover the operatives.
Note 8b	Use of a Mechanical Access Platform to Recover Operatives A mechanical access platform must be on standby to ensure that response times are acceptable in the event of an emergency. Key items to consider: - Can the platform reach all areas where a rescue may be required. - Confirm that the ground conditions are capable of supporting the loads associated with the size and type of machine required. - Consider whether the areas below are subject to traffic flow or other hazards that could affect the safe use of the machine. Planning must also include how the suspended access equipment will be recovered once the operatives have been rescued.
Note 8c	Calling Out Emergency Services to Evacuate Operatives In general, the emergency services will not permit themselves to be used as a pre-planned rescue option for suspended access equipment. A rescue plan must not rely on calling the emergency services unless prior consultation has taken place and they have confirmed that they possess the necessary equipment, skills, and capability to undertake such a rescue. You must also ensure that the emergency services can provide an appropriate response time for the specific risks involved. Consideration must additionally be given to how the suspended access equipment will be recovered once the operatives have been evacuated.

Note 8d	IRATA-Trained Rope Access Technicians for Third-Party Rescue A rope access team must be on standby to ensure that callout response times are acceptable in the event of an emergency. The rope access company must pre-plan and assess the rescue techniques and equipment required before any rescue operation becomes necessary. Suitable, tested, and inspected rope-access suspension points must be provided around the roof area in all locations where a rescue may be required. It is not acceptable to assume that any part of the façade access equipment or tracks can be used as rope access suspension points. This must be confirmed by the system designer, manufacturer, installer, or the access-equipment maintenance organisation. Consideration must also be given to the recovery of the suspended access equipment once the operatives have been rescued.
Note 8e	Egress via a Balcony, Opening Window, or Other Building Aperture The welfare of operatives must remain the primary concern. In some situations, it may be necessary to plan for the removal of glazing or to utilise another suitable building aperture to allow operatives to exit the platform and re-enter the building. This may be required at height or at intermediate roof levels where no roof access is available. While this method may be feasible in certain circumstances, it would not normally be considered part of a robust rescue plan and should therefore only be used where other safer or more reliable options are not practicable.
Note 8f	Self-Rescue / Personal Evacuation Kits Self-rescue or personal evacuation kits are increasingly being promoted by organisations seeking a quick solution to rescue requirements. However, they are often not appropriate. The Duty Holder must consider and verify the following before such equipment is used: • Manufacturer verification of anchorage suitability: The manufacturer of the façade access equipment must confirm that the proposed anchorage point is capable of sustaining the loads that may be imposed during a rescue operation using an evacuation kit. • Verification of roof suspension suitability: The manufacturer must also confirm that the roof-suspension system of the access equipment is designed to accommodate the additional loads generated when the rescue kit is used. • Regulatory compliance (LOLER 1998): Rescue kits are used to lift or lower people. Under the Lifting Operations and Lifting Equipment Regulations 1998 (LOLER), “(3) Subject to paragraph (6), every employer shall ensure that lifting equipment which is exposed to environmental conditions that could result in deterioration, which is liable to result in a dangerous situation is – (a) Thoroughly examined - (i) in the case of lifting equipment for lifting persons or an accessory for lifting, at least every 6 months” • Training requirements: Operatives must be suitably trained and competent to use the rescue kit safely in an emergency.

- **Limitations regarding incapacitated operatives:** If an operative is incapacitated, they will not be capable of performing self-rescue. Therefore, this method is not suitable for all rescue scenarios.
- **Duty Holder control of rescue kits:** The rescue kit must be supplied and controlled by the Duty Holder to ensure suitability of anchor points and the suspension system, as outlined above.
- **Harness compatibility:** The harness normally used within façade access equipment may not be suitable for use with self-rescue systems. A harness designed for work positioning, not fall arrest, may be required.
- **Storage requirements:** Rescue equipment must be stored in a cool, dry environment to prevent deterioration.
- **Pre-use checks:** Where practicable, rescue equipment should undergo pre-use checks by a competent person.

HSE Position on Rope Evacuation

HSE OC 282/31, 2013 states "The HSE position is that Rope evacuation is a 'last resort', which is only to be used only in exceptional circumstances where;

1. The equipment is immobilized and cannot be repaired, lowered or long travelled in a reasonable time; OR
2. An alternative 'safer' means of escape cannot reasonably be provided; OR
3. The operator is at risk from another more imminent hazard, which cannot reasonably be controlled to allow rescue without using the rope evacuation system"