



**Northern Ireland
Fire & Rescue Service**

Standard Operating Procedure No 27

Working at Height

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Version Control

This document and subsequent amendments will be issued by the Emergency Response Department, Northern Ireland Fire & Rescue Service (NIFRS) Headquarters.

Amendments are detailed as below:

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| 1 | 26/06/2006 | Initial issue of Standard Operating Procedure (SOP) | Operations Policy Unit | Group Commander (GC) Synnott |
| 2 | 10/12/2015 | Version Control inserted Full review of SOP - consultation | Station Commander (SC) McKerracher | GC Sinclair |
| 3 | 06/04/2016 | Section 4.2 – addition of Specialist Rescue Team (SRT) working at height platform information | Watch Commander (WC) Shields | GC Harper |
| 4 | 26/04/2016 | Final draft following consultation | GC Harper | Operations Policy Forum (OPF) |
| 5 | 20/05/2016 | Issue of SOP | GC Harper | OPF |
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1 Introduction

1.1 Work at Height Regulations (Northern Ireland) 2005

Work at Height Regulations (Northern Ireland) 2005 place responsibilities on the management of NIFRS to provide safe systems of work for personnel when they are working at height or close to fragile surfaces. The regulations have no minimum requirement for work at height and, therefore, include all work activities where there is a need to control the risk of falling a distance, liable to cause injury.

Incidents involving working at height present a serious risk to Firefighters. It is essential that Incident Commanders (ICs) carry out a full Dynamic Risk Assessment on arrival and adhere to the guidance contained within this document. The risk assessment will determine if any actions are necessary before the arrival of further specialist equipment and supporting crews. The operational tactics described in this document will assist the IC in determining the actions to be taken, the hazards involved, and the control measures that must be implemented.

This SOP includes guidance relating to working at height in the following categories:

- Operational activity on the incident ground;
- Operational training activities.

2 Pre-Determined Attendance (PDA)

There is no specific PDA for incidents that require working at height.

ICs should consider which NIFRS resources are most appropriate for the incident and request from RCC. Some of these include:

- Additional appliances for ladders or working at height equipment;
- Aerial appliances (Vema or Hydraulic Platform);
- Confined Space Access Rescue (CSAR) trained station;
- NIFRS Specialist Rescue Team (SRT).

3 Significant Hazards

3.1 Fall from Height

Any fall from height can lead to serious or fatal injuries.

3.2 Overhead Power Cables

Electrical arcing may occur when personnel or equipment are in close proximity to live power lines which may result in death or injury.

3.3 Fragile Surfaces

Sudden collapse of underfoot material, resulting in serious injury.

3.4 Falling Objects

Injury caused by objects striking persons below.

4 Control Measures

At **all** incidents where personnel are exposed to the risks of working at height, the IC must implement the hierarchy of control:

- **Avoid** - Can the task be achieved without working at height?
- **Prevent** - Ensure work is carried out from a place of safety and provide equipment to prevent falls.
- **Mitigate** - As a last resort, provide appropriate equipment to minimise the fall distance.

4.1 General Control Measures for all Working at Height

- Restrict number of personnel within risk area.
- Establish cordons.
- Appoint and fully brief a Safety Officer.
- Full Personal Protective Equipment (PPE) to be worn.

4.2 Fall from Height

- Consider use of Aerial appliance or specialist equipment.
- Use appropriate harnesses secured to anchor points.
- Consideration given to mobilisation of SRT, for use of safe working at height, heavy vehicle rescue platform.

4.3 Overhead Power Cables

- Is it necessary to work near overhead cables?
- Isolate power, if possible.
- Safe working distance to be applied near live cables.
- Do not apply water or foam near live cables.

4.4 Fragile Surfaces

- Avoid committing personnel onto fragile surfaces.
- Visually inspect surface before deploying personnel.
- Fully brief personnel of the risk of fragile/unstable surface.
- Consider use of Aerial appliance.
- Use working at height equipment as a minimum protection.
- Maintain access and egress from site.

4.5 Falling Objects

- Limit access into the risk area.
- Fully brief personnel.
- All personnel within risk area to be vigilant of falling objects.

5 Operational Procedures

Working at height should be avoided where possible. At incidents where this is unavoidable, working at height will only be permissible under the following circumstances:

- where life is known or reasonably suspected to be in danger;
- to prevent the sudden escalation/deterioration of the incident;
- where the work involves the normal use of NIFRS ladders, Aerial appliances and approved operational procedures.

5.1 Incident Commander Considerations

As soon as reasonably practicable, the IC should:

Determine

- all relevant information on the situation, type of incident, whether persons are in danger, and if rescues need to be performed;
- if additional resources are required to ensure a safe system of work, such as Aerial appliance, SRT, CSAR trained station;
- what local hazards exist, eg, overhead cables, fragile surfaces and take appropriate action to limit risk to personnel and brief crews accordingly;

Establish

- an Inner Cordon (stop the risk of injury below operations from falling equipment and/or debris);
- an appropriate level of PPE within the Hazard Zone;
- access and egress and ensure strict control of personnel entering the risk area;
- a fully briefed Safety Officer.
- and communicate an Emergency Evacuation Plan to all;
- visual and/or verbal communication with personnel working at height;
- an appropriate level of the Incident Command System;

- an Incident Log;
- the use of the working at height kit.

Consider

- the impact of adverse weather conditions on the Tactical Plan;
- when working near overhead cables the following:
 - whether low or high voltage;
 - requesting attendance of Northern Ireland Electricity to isolate supply/provide advice;
 - if using a ladder or Aerial appliance, maintaining a distance of 10 m;
- adequate illumination;
- where personnel are exposed to unnecessary risk due to inadequate control measures, stopping operations and reviewing the Tactical Plan.
- prohibiting the use of non-NIFRS equipment to gain access at height;
- once an alternative operational strategy is available, remove personnel from the risk, ie, once an Aerial appliance arrives, remove personnel from risk area (roof) and work from the Aerial platform.

Note:

An “informative” message stating “**personnel working at height**” should be relayed to RCC, unless working from NIFRS ladders or Aerial appliances. Message to include work being undertaken, eg:

**"From Watch Commander Smith at High Street -
young child trapped on flat roof; personnel working
at height on flat roof to perform rescue."**

5.2 Aerial Appliances

Before requesting an Aerial appliance, the IC should consider:

- the load-carrying capacity of the ground where the appliance will be positioned;
- the proximity of overhead hazards:
 - minimum safe working distance - 10 m
 - if used as a water tower, safe working distance - 30 m;
- the environmental factors, particularly wind strength.

6 Handover of Command

On arrival of supporting appliances and Officers, the IC of the initial emergency crew response will conduct a formal handover of command by covering the following details:

6.1 Information on the incident

A brief overview of what has taken place at the incident.

6.2 Information on Risks

Risks that have been identified and control measures that have been implemented or have still to be established, specifically that personnel have implemented working at height procedures.

Details of the safe system of work, for personnel working at height.

6.3 Information on Resources

- Appliances/resources on scene.
- Appliances/resources en route/requested.