



National
Operational
Guidance

Hazard

**Restricted access and egress:
Underground structures**



NFCC
Fire Central
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Hazard - Restricted access and egress: Underground structures

Hazard Knowledge

Fire and rescue service personnel need to consider the possibility of unusually complex access to and egress from the scene of operations. Considerations may include the need for additional and varied entry procedures and routes, extended travel times, various transportation methods to scenes of operations and using unfamiliar equipment.

Gaining access to the scene of operations in a safe and controlled way is a critical part of fire and rescue service operations. The means responders may use to access the infrastructure will vary depending on type, age and location. Some infrastructures may have facilities built in that accommodate fire and rescue service needs, such as:

- Hard standing areas for emergency vehicles
- Dedicated rendezvous points (RVPs) for emergency vehicles
- Fire and rescue service communications extended to cover the rendezvous points (RVPs), shafts, underground area or tunnels
- Premises information boxes or security standard boxes with plans, entry codes or keys
- Security doors providing an agreed method of fire and rescue service entry without unreasonable delay, normally using keys, entry codes or remote door release devices
- Firefighting stairs and lifts
- Ventilation system to protect firefighting access from contamination
- Firefighting lobbies
- Raised walkways



Control measure - Maintain safe access and egress

Control measure knowledge

Any incident involving underground structures, both natural and man-made, will require consideration of safe access and egress routes for committed personnel. Alternative means of making an entry should be considered and emergency arrangements put in place.



In addition to identifying the most appropriate access point, the precise location of the incident within the infrastructure must be found to:

- Identify the likely travel distances and working duration of crews
- Identify or anticipate any blockages that may affect access
- Factor in the likely fatiguing effects of extended travel distances and carrying equipment, including return journeys
- Determine the appropriate use of any vehicle that may be available and suitable for carrying personnel or equipment

Using lights, markers or barrier tape should be considered to indicate the extent of the inner cordon within complex structures, or where there are no distinguishing way finders or location indicators. Similarly, these items should be considered for indicating the door or level that leads to the way out along the route to the surface. This may be particularly important where the shaft is part of a larger surface building

Strategic actions

Fire and rescue services should:

- Establish a periodic review and amendment process to ensure the strict control and accuracy of fire and rescue service guidance. This will be an ongoing process to reflect construction advancement and the subsequent need to revise plans
- Assess the need to provide additional equipment and training for crews making an intervention below ground.
- Conduct regular site visits to ensure complete awareness of the site access point and access control system

Tactical actions

Incident commanders should:

- Identify the location of all potential access and egress routes to inform their incident plan
- Establish and maintain safe means of access to, and egress from, underground structures at all times
- Only use access lifts and transport approved for fire and rescue service purposes