Evacuation Lifts

- 1. Policy D5 of the London Plan requires the highest standards of accessible and inclusive design to be met, stating:
 - "3.5.2 Inclusive design is indivisible from good design. It is therefore essential to consider inclusive design and the development's contribution to the creation of inclusive neighbourhoods at the earliest possible stage in the development process from initial conception through to completion and, where relevant, the occupation and on-going management and maintenance of the development."
- 2. Policy D5(B5) requires development proposals to be:
 - 5) ...designed to incorporate safe and dignified emergency evacuation for all building users. In all developments where lifts are installed, as a minimum at least one lift per core (or more subject to capacity assessments) should be a suitably sized fire evacuation lift suitable to be used to evacuate people who require level access from the building."

London Plan Policy D5(B5) is applicable to all development proposal applications.

- 3. This guidance provides additional information in relation to Policy D5(B5) requirements for evacuation lifts.
- 4. It presents a methodology for applicants and planning officers to use and provides additional guidance and context on evacuation lifts to enable greater understanding of the subject during the planning process.
- 5. For major development proposals it should be read in conjunction with the Mayor's London Plan Guidance Sheet Policy D12(B) Fire Statements.

What is an evacuation lift?

- 6. An evacuation lift is a lift that has been specifically designed to be used in an evacuation situation. Evacuation lifts are particularly beneficial for people who require level access. Evacuation lifts can be used in 'automatic mode', under the direction of one of the following:
 - building management
 - a trained evacuation assistant
 - rescue services.

7. In non-emergency situations, evacuation lifts operate as normal passenger lifts allowing everyday use, but they have additional functions and capabilities which allow them to shift into an emergency state, if required.

Level of lift provision and contingency

- 8. Evacuation lifts should be provided in addition to Building Regulations requirements for firefighting shafts/ lifts (see Annex B and Annex C) to ensure they can be used for evacuation purposes when the firefighting lift is in use by the fire and rescue service. Supporting text to London Plan Policy D5 explains: "3.5.10 Buildings should be designed and built to accommodate robust emergency evacuation procedures for all building users, including those who require level access. All building users should be able to evacuate from a building with dignity and by as independent means as possible. Emergency carry down or carry up mechanical devices or similar interventions that rely on manual handling are not considered to be appropriate, for reasons of user dignity and independence. The installation of lifts which can be used for evacuation purposes (accompanied by a management plan) provide a dignified and more independent solution."
- 9. London Plan Policy D12 Fire safety requires:

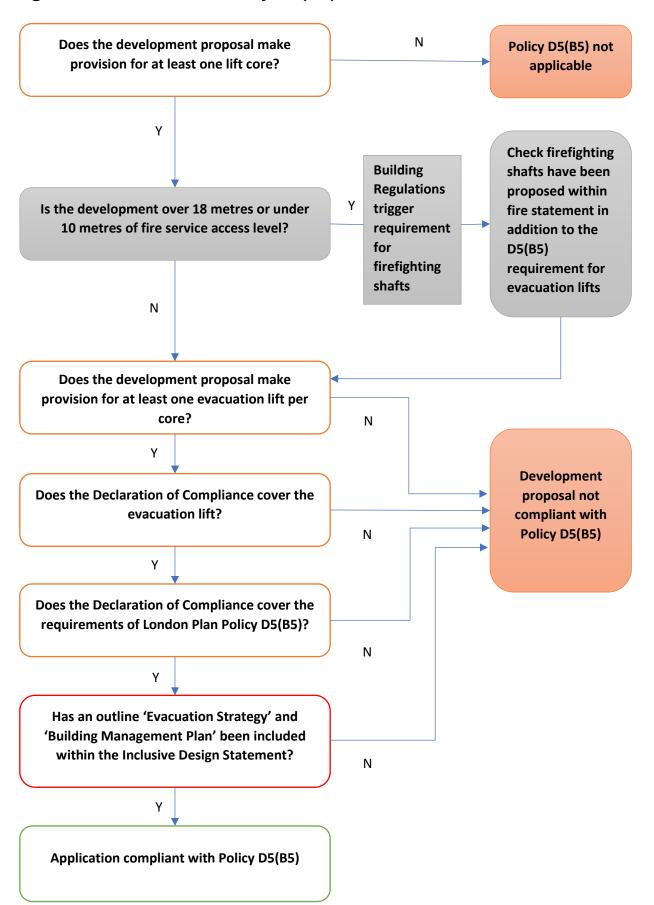
 "In the interests of fire safety and to ensure the safety of all building users, all development proposals must achieve the highest standards of fire safety."
- 10. It specifically goes onto state that development proposals must:
 - 5) develop a robust strategy for evacuation which can be periodically updated and published, and which all building users can have confidence in

and

- 6) provide suitable access and equipment for firefighting which is appropriate for the size and use of the development.
- 11. The above requirements should be taken into account when planning the lift provision within a development and the building's management (see iii Building Management Plan below).
- 12. The resilience of the lift provision within a development should be carefully considered. Taking into account the above, contingency arrangements should be planned for people who require level access, as well as fire fighters, in the event of a lift breaking down or being out of service due to maintenance (whether this be an evacuation or firefighting lift). Details of the contingency arrangements, including associated built facilities (this could be additional firefighting lift(s)) and associated management arrangements, should be provided within the Fire Statement for major development proposals, or in the Inclusive Design Statement for non-major development proposals required by the London Plan.

- 13. Figure 1: The **London Plan Policy D5(B5) Evacuation lift checklist** below provides a process diagram for planners and applicants defining the role of the planning officer and the criteria against which the planning officer will be checking the provision of evacuation lifts at planning application stage.
- 14. Note: the grey boxes in Figure 1 below and Annex C of this guidance sheet highlight Building Regulations requirements and not specific London Plan policy requirements, however the planning officer should be aware of these requirements to ensure that evacuation lifts are being provided in addition to Building Regulations requirements for firefighting shafts/ lifts.

Figure 1: London Plan Policy D5(B5) Evacuation lift checklist



i) Declaration of Compliance

- 15. A Declaration of Compliance is a statement written and signed by the author confirming that the technical content produced within the development application complies with all relevant legislation and London Plan fire safety policy requirements.
- 16. A Declaration of Compliance should be made within the Inclusive Design Statement / Fire Statement and be cross referenced in the Design and Access Statement, where provided in relation to Policy D5(B5) and provide assurance that the following criteria have been met:
 - The applicant is satisfied the design and provision of evacuation lifts is compliant with the stated design code.
 - The applicant is satisfied that a suitable outline evacuation strategy is provided within the Inclusive Design Statement/Fire Statement (see below) and can demonstrate how the provision of evacuation lift/s support this strategy.
 - The applicant is satisfied that a suitable outline management plan is provided within the Inclusive Design Statement/Fire Statement (see below) and can demonstrate how the operation of evacuation lifts in an emergency situation can be undertaken.
 - The applicant is satisfied that the outline management plan clearly identifies the principle evacuation lift features that should be maintained by the building management team.
- 17. The Declaration of Compliance should be signed off by the applicant.
- 18. If the application is a major development the Declaration of Compliance should be contained within the Fire Statement (see London Plan Guidance Sheet Policy D12 (B) Fire Statements). If the application is not a major development, the Declaration of Compliance should be contained within the Inclusive Design Statement (see London Plan Policy D5 Inclusive Design).

ii) Evacuation Strategy

19. The provision of evacuation lifts should be designed to support the building's evacuation strategy. The evacuation strategy should be determined at the earliest design stage along with any additional facilities deemed necessary by the building designer to successfully support the evacuation strategy. Supporting justification for these measures and how they meet the requirements of D5(B5) should be detailed within the Fire Statement (for major developments) or Inclusive Design Statement.

iii) Building Management Plan

- 20. Included within the Fire Statement or Inclusive Design Statement should be the framework for a Building Management Plan. A Building Management Plan details how occupants will be able to competently operate the evacuation lift facilities in an emergency situation. Override functions associated with evacuation lifts can only be operated by suitably trained competent persons, so due consideration must be given at the earliest design stage as to how the intended occupancy type of the proposed development will best facilitate the use of the lift and overall evacuation strategy.
- 21. The Building Management Plan should also contain details of contingency arrangements for people who require level access, in the event of the evacuation lift breaking down.

iv) Capacity Assessments

- 22. London Plan Policy D5(B5) states that in all developments where lifts are installed, as a minimum, at least one lift per core (or more subject to capacity assessments) should be a suitably sized evacuation lift. The **minimum provisions** outlined within the Fire Statement or Inclusive Design Statement should be for one evacuation lift per core within the proposed development.
- 23. The details of the capacity assessment, specifically the methodology for assessing potential building occupants, and what assumptions this has been based on, as well as the justification for the outcome of the assessment, should be included within how the risk rating attached to the lift safety of occupants has been determined, providing reasonable justification for the recommended measures to suitably mitigate the identified risk.

Appendix A - Residential scenario

Residential developments

- A1. London Plan Policy D5(B5) requirements extend to all development proposals, including residential developments. The requirement for the provision of evacuation lifts within residential properties represents a commitment to ensure the highest standards of accessible and inclusive design are considered across the built environment within London.
- A2. Typically, the use of evacuation lifts requires the manual intervention of suitably trained, competent persons. It is recognised that such persons may be absent from some residential developments. In the event that the building designer identifies the absence of competent persons to facilitate the evacuation strategy in a residential building; alternative measures should be detailed. In this scenario the requirements of D5(B5) still apply and it is the duty of the building designer to explore suitable alternatives to meet the policy requirements. See the example below.

Evacuation lifts within residential developments

Evacuation lifts can be installed to operated utilising the following three methods:

- Driver assisted evacuation
- Automatic evacuation
- Remote assisted evacuation

Where a development proposal is categorised as residential, and there is an absence of competent person allowing for a driver assisted evacuation, an alternative operation method should be considered.

Alternative evacuation lift types suitable for residential premises that do not require competent persons to be present should be clearly outlined within the Fire Statement or the Inclusive Design Statement as per Policy D5(B5)). The information provided should detail how the overall evacuation strategy will be supported.

Note: Remote assisted evacuation technology is in its infancy and still being developed at the time of publication, featuring in draft standards rather than fully adopted standards.

Appendix B - Evacuation lifts vs firefighting lifts

B1. Evacuation lifts should be not misinterpreted as firefighting lifts. The differences between them are outlined in greater detail below. Applicants must not make provision for the installation of a firefighting lift where an evacuation lift is required by London Plan Policy D5(B5).

	Evacuation lifts	Firefighting lifts
Description	A lift system specifically designed to be used in an evacuation situation for the evacuation of people, including people who require level access.	A lift system for use of the fire and rescue service to facilitate the safe conveyance of firefighting personnel and equipment in the event of an emergency.
	These lifts are generally used as normal passenger lifts until required for the purposes outlined above.	These lifts are generally utilised as normal passenger lifts until required by the fire and rescue service for the purposes outlined above.
Key Features	Cause and effect interface between the lift control system, fire detection and alarm system to support the evacuation strategy.	Cause and effect interface between the lift control, fire detection and alarm system.
	Emergency intercom/ communication system and lift operation.	Emergency intercom system and lift operation.
	Provision of a management plan to determine operational procedures for trained staff designated to manage and use the lift in an emergency situation.	Provision for trap doors and ladders for rescue operations.
	Separate power supply to the lift to enable the lift to remain in use throughout the evacuation process.	Separate power supply to enable the lift to remain in use.
		Water protection provisions for electrical components in the shaft and on the lift car.
Relevant British Standard	BS EN 81-76 when published BS 9991, BS 9999	BS EN 81-72 BS 9991, BS 9999

B2. Given the lifespan of new buildings it is important to incorporate evacuation lifts to ensure suitable evacuation for all building users from initial occupation and acknowledge that standards and technology will improve over time. While BS EN81-76 is being drafted, developers should implement innovative solutions for the implementation of evacuation lifts in the knowledge that for non-managed buildings, they can be operated when the fire service or other responsible person arrive.

Appendix C - Relationship to Building Regulations requirement for firefighting shafts

- C1. Note: the grey boxes in Figure 1 above and this Annex highlight Building Regulations requirements and not specific London Plan policy requirements, however planning officers should be aware of these requirements to ensure that evacuation lifts are being provided in addition to Building Regulations requirements for firefighting shafts.
- C2. A firefighting shaft is a construction enclosure that contains a firefighting lift, firefighting lobby and firefighting stair. In development proposals where the requirement for a firefighting shaft has been triggered, this provision should be the default requirement in addition to the policy requirements of London Plan Policy D5(B5).
- C3. The current (at time of publication) Building Regulation requirement for most building types is that firefighting shafts should be provided in buildings 18 metres above or 10 metres below fire service vehicle access level. There are variations to this rule and additional information can be found in Building Regulations Approved Document B Volumes 1 and 2.
- C4. The provision of a firefighting shaft/s in a development proposal does not remove the policy requirements for evacuation lifts as detailed within this guidance sheet.

Firefighting shaft provisions and relationship to London Plan Policy D5(B5)

Firefighting shaft provisions and relationship to London Plan Policy D5(B5)
An enclosure that contains a firefighting lift, firefighting lobby and firefighting stair.
Required where a development proposal has a storey;
18m above fire service vehicle access level 10m below fire service vehicle access level

n/a	Firefighting shaft provisions and relationship to London Plan Policy D5(B5)
Planning Scenario A	Development proposal triggers Building Regulation firefighting shaft requirements.
Planning Action	London Plan Policy D5(B5) requirements must be met in addition to the Building Regulation provision for firefighting shaft. It is the duty of the applicant to demonstrate how this is achieved.

n/a	Firefighting shaft provisions and relationship to London Plan Policy D5(B5)
Planning Scenario B	Development proposal does not trigger Building Regulation firefighting shaft requirements.
Planning Action	London Plan Policy D5(B5) requirements must be met. It is the duty of the applicant to demonstrate how this is achieved.