

Report on Passenger Lift at:

**Grenfell Tower
London
W11 1TG**

**For and on behalf of
The Royal Borough of Kensington and Chelsea**

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**SECTION 1:
Introduction**

1. INTRODUCTION**1.1. CLIENT'S BRIEF**

calfordseaden have been commissioned by The Royal Borough of Kensington & Chelsea Tenant Management Organisation Limited to inspect and report on the two passenger lifts at Grenfell Tower, London W11 1TG prior to some major works being carried out by Rydons on the lifts in April 2015.

The report provides an indication of the overall condition and reliability of the lifts at the time of our survey.

1.2. BASIS OF REPORT

The report has been prepared following a visual survey of the lifts carried out on Thursday 19th March 2015.

At the time of the inspection both lifts were in service and operational.

No electrical or mechanical testing was undertaken at the time of our survey.

Documentation referred to when preparing this report includes:

- Lift Maintenance Log Cards

SECTION 2:
Description of Installation

2. DESCRIPTION OF INSTALLATION**2.1. OUTLINE DETAILS**

The building is served by two passenger lifts having the following details:

Manufacturer	:	Apex Lifts
Date of Installation	:	Refurbished 2005
Type of Lifts	:	Passenger Lifts
Number of Lifts	:	2
Lift Capacity	:	12 persons 900Kg
Rated Speed	:	2m/s
Drive System	:	VVVF
Control System	:	Full collective
Levels Served	:	S, W, 1 – 20: 22 floors
Type of Doors	:	Single panel side opening
Door Protection	:	Electronic safety edges
Machine Room Location	:	Above well
Lifts Maintained by	:	ELA Group

**SECTION 3:
Design Analysis**

3. DESIGN ANALYSIS

3.1. COMPLIANCE WITH STANDARDS

The lifts comply with the current British Standards and Health & Safety requirements applicable at the time of the installation/refurbishment.

3.2. TYPE OF EQUIPMENT

The lifts were refurbished by Apex Lifts circa 2005 and employed the use of good quality third party manufactured equipment.

The equipment is of a heavy duty rating. The lift is laid out in the usual manner for a traction lift with the machine room above the well.

The drive system should provide a satisfactory level of ride comfort and stopping accuracy which is usually associated with this type of modern drive system.

The lifts should be able to cope with anticipated traffic flow in the building and provide a satisfactory level of service.

3.3. LIFE EXPECTANCY

The design life expectancy of this type of equipment is between 20 and 25 years. Given that these lifts were refurbished in 2005, as long as the lifts are subject to a good quality maintenance regime their life expectancy should be another 10-15 years.

3.4. DISABLED ACCESS / EQUALITY ACT

The European standard EN81-70 2003 Accessibility to Lifts for Persons including Persons with Disability represents best practise regarding disabled access. These lifts conform to the current standard.

SECTION 4:
Condition of Installation

4. CONDITION OF INSTALLATION

4.1. GENERAL CONDITION

The general condition of the lifts is commensurate with age. At the time of our survey there was a large amount of building works going on and being prepared in the building and there was a large amount of builders dust that has been attracted to the lift well. Although minimal, this is starting to have an effect of the condition of the lifts.

4.2. LEFT HAND LIFT H90

At the time of our survey the following items were noted as requiring attention:

- This lift appears to stop on its upper limit at the top floor and this has been noted in the call-outs during the previous three months. We also witness the lift stopping high at the top floor and it is our recommendation that a technical visit is carried out to ascertain the full nature of this problem.
- Landing door pick up rollers require replacing on 15th floor.
- Landing door pick up rollers require replacing on 10th floor landing doors.
- Landing door pick up rollers require replacing on 4th floor.
- The car door drive chain needs adjusting.

4.3. RIGHT HAND LIFT H91

At the time of our survey the following items were noted as requiring attention:

- The top right hand rear car guide roller has been damaged and this requires immediate attention as this is having an adverse effect on the ride quality of the lift.
- The car door drive chain requires adjusting.
- Landing door pick up rollers on 13th floor require replacing.
- The landing door pick up rollers on 12th floor require replacing.
- The landing door pick up rollers on 10th floor require replacing.
- The landing door pick up rollers on 9th floor require replacing.
- The landing door pick up rollers of 7th floor require replacing.
- The landing door pick up rollers on 6th floor require replacing.
- The landing door pick up rollers on 5th floor require replacing.
- The landing door pick up rollers on 4th floor require replacing.
- The landing door pick up rollers on 3rd floor require replacing.
- The landing door pick up rollers on 1st floor require replacing.
- The landing door pick up rollers on level W require replacing.

4.4. LIFT RELIABILITY

H90 – On checking the lift log card there was little to suggest there was any major problems associated with the lift apart from the issue with an entrapment where the lift overran the top floor. This has previously been noted as requiring attention.

H91 – On checking the log cards on site there is little in the way to suggest that there are any major problems with the reliability of this lift.

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We also checked the lift data loggers and there are a large number of problems where the doors are being held by the users, doors being nudged by the users and landing and car pull buttons being stuck. There was nothing to suggest that there were any major problems with the reliability of these lifts.

SECTION 5:
Summary and Recommendations

5. SUMMARY AND RECOMMENDATIONS**5.1. GENERAL SUMMARY**

The defects identified in this report should be addressed by your current lift maintenance contractor, ELA Group, and a visit should be carried out by a technician to ascertain the finite details of the problem with the left hand lift over travelling the top floor. However, the general condition of the lifts is satisfactory.

5.2. RECOMMENDATIONS

As previously noted, there is very little in the way of recommendations apart from the maintenance items that have been noted with each lift. However, one overriding factor is that once the lift works have been carried out, then a full clean down of both lifts should be carried out and then should be re-inspected prior to lifts going into service to make sure that this work has been carried out to a high standard to assist in the continued reliability of the lifts.