

Standard Lift Specification

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1.0 Purpose of Document

- 1.1 This document sets out the Standard Lift Specification to be used for all lift installation work at % R X U Q H P R X W K 8 Q L Y H U V L W \.

2.0 General Requirements

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- 2.12 The lift manufacturer / installer shall include for taking every practical precaution to ensure quiet operation of the new equipment. Every precaution shall also be taken to prevent vibration being transmitted to the building structure from the controller and all other items of lift equipment. The lift manufacturer / Installer shall provide details of the guaranteed noise and vibration levels which will be achieved by completed installation.
- 2.13 The Car Call system shall be selected to maximise performance of the lift, and typically shall be a full collective micro processor type.
- 2.14 Passenger lifts shall generally be design

3.0 Particular Requirements

Control Systems

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- Preparing to depart.
- Doors closing.
- Remove obstruction from doors.
- Lift overloaded.
- Lift failed to start please press door open push.

The enunciator shall be of a digital type capable of on site programming with facility for incorporating a further ten separate transmissions.

- 3.7 Each passenger carrying lift with automatic doors shall be fitted with a Memco 3D curtain safe edge.
- 3.8 Door operators shall be heavy duty variable voltage variable frequency.
- 3.9 The lift shall include but not be limited to the following features installed:
- An emergency recall switch shall be installed above the ground floor architrave. The switch is to be flush mounted and shall be contained behind a Euro key locked hinged metal plate front cover. The cover shall be engraved "Emergency Recall Switch" the engraving shall be in filled with red epoxy resin. The emergency recall switch shall bring the lift to the ground floor and the lift shall operate in an Emergency type mode.
 - The lift shall also be provided with connection

- 3.20 A motor room lighting switch shall be installed with engraved identification above the switch "Motor Room" an emergency lighting key test switch shall be installed for the emergency lighting with engraved identification on the switch.
- 3.21 A shaft Lighting switch shall be installed with engraved identification above the switch "Shaft Lighting" an emergency lighting key test switch shall also be installed for the emergency shaft lighting with engraved identification above the switch "Emergency Shaft Lighting"
- 3.22 The electrical installation shall be installed in galvanised trunking / conduit.
- 3.23

- 3.38 Rubber mats to BS921 shall be provided for car top working and landing control panels.
- 3.39 Full emergency release instructions shall be provided for both engineers and the fire brigade this shall be laminated and fixed on the inside of the control panel.
- 3.40 Landing control panels locks shall be DEuro type key

Hydraulic Lift Installations

- 3.41 If any hydraulic lifts are to be specified their application shall be agreed with the University (V W D W H V ' H S D U W P H Q W before the specification is developed.

Scenic Lifts – Additional Requirements

- 3.42 The installer shall provide full glass specification and glass manufacturer details.
- 3.43 The provision of 2 glass cleaning visits shall be included in the 12 month warranty period. The glass cleaning shall include internal and external car and shaft installation.
- 3.44 All access equipment / scaffold required for future safe working shall be provided. The use of such equipment shall be clearly demonstrated and detailed in the Operations and Maintenance Manual, which shall incorporate full written risk assessments and method statements for cleaning and lift maintenance
- 3.45 Particular attention shall be given to preventing finger trapping on glass panel lift doors.
- 3.46 Fan assisted ventilation shall be installed in the car for passenger comfort with a minimum air flow exchange rate of 5 air changes per hour.
- 3.47 Full emergency release instructions shall be provided for both engineers and the fire brigade. The instructions shall be laminated and fixed on the inside of the control panel.
- 3.48 The designer shall consider the installation of modesty panels.

Goods Lifts – Additional Requirements

- 3.49 A car call acceptance system shall be fitted
- 3.50 A sounder alarm signal shall be fitted in the car which activates when the lift is called with the gates are open.
- 3.51 Vision panels shall be installed on landing and car gates.
- 3.52 A robust and hard wearing car finish shall be installed which shall incorporate bumper

Disabled Access – Basic Requirements

- 3.55 Disabled Access Lift installations shall only be installed where no alternative exists as it is University preference to install full lift installations.
- 3.56 Control equipment shall be fully accessible from the landing control panel.
- 3.57 Landing floor control panels shall have an identified safe working zone. The designer / installer shall be responsible for detailing this in the O&M Manuals.
- 3.58 Rubber mats shall be supplied. The designer / installer shall be responsible for ensuring their storage and accessibility for use.
- 3.59 Emergency release shall be a lever type or a key operation type.
- 3.60 Isolation keys shall be removable when lift is in operation.
- 3.61 A windcrest auto-dialler shall be fitted.
- 3.62 Fluorescent Lud type fittings with self contained emergency lighting shall be fitted in shaft type installations.
- 3.63 Landing control panels locks shall be a Euro type key.
- 3.64 It is noted that Disabled lifts have manufactured car finishes and shafts therefore the University standards in these areas shall not apply.
- 3.65 Any car lighting shall be controlled automatically by means of a sensor controlled fitting.

Scissor Lifts – Basic Requirements

- 3.66 Protective blinds or chain link skirts shall be installed on the underside of the platform.
- 3.67 A safety edge trip bar shall be installed on the underside of the platform.
- 3.68 A pit prop shall be supplied and fitted in a secured storage area near or within the lift installation.
- 3.69 A Lud fluorescent light fitting shall be installed under the platform, which on power failure will operate a self contained emergency fluorescent.
- 3.70 An emergency stop switch shall be located under the platform next to the machine.
- 3.71 Machinery control equipment shall be caged off and lockable by a Yale type lock which is master suited details available from the %RXUQHPRXWK 8QLYUWWDWHV 'HSDUWPHQW
- 3.72 A rubber mat shall be provided and stored in a lockable storage area near or within the lift control unit area. The designer / installer shall be responsible for ensuring their storage and accessibility for use.
- 3.73 Instruction signage shall be supplied and securely fixed near the lift operating controls.
- 3.74 Safe Working Load traffolite signage stating metric weight shall be fitted and clearly visible for lift users.

- 3.75 The designer / installers shall ensure that due consideration is given to the safe loading and unloading of goods onto the scissor lift. This task shall be clearly demonstrated and detailed in the Operations and Maintenance Manual, which shall incorporate full written risk assessments and method statements for this.

Service Lifts – Basic Requirements

- 3.76 A gong arrival shall be fitted on every landing.
- 3.77 A landing arrival light shall be fitted on every landing.
- 3.78 Call points shall illuminate on call acceptance.
- 3.79 User's instruction signage shall be fitted near the lift control panel.
- 3.80 Access equipment shall be provided to maintain the hoist equipment, and shall be stored near or within the lift installation in a secured lockable area this shall include rubber mats and steps/ platform.
The designer / installer shall be responsible for detailing this in the O&M Manuals.
- 3.81 A fluorescent lud type light fitting shall be installed incorporating a self contained emergency back up above hoist /control equipment this shall be switched from near the access entrance door.
- 3.82 An emergency stop button mushroom type shall be installed near hoist motor.
- 3.83 Mains isolator shall be located within equipment access area.
- 3.84 Access doors to lift machinery shall be marked up with current B.S signage for lift machinery.
- 3.85 All service lifts shall incorporate a car door installation.

Fire Fighting Lifts – Additional Requirement

- 3.86 In addition to previous clauses any Fire Fighting lift shall meet the requirements of the building users, the University Fire Officer, and the Fire Service and shall comply fully with the requirements of all relevant British Standards.

Escalator Installations – Basic Requirements

- 3.87 Handrails shall have white dots to clearly indicate moving parts.
- 3.88 Brush guards shall be installed on the skirting and the guards shall stop 50 mm short from the comb plates.
- 3.89 A key start switch shall be fitted and a minimum of 4 keys supplied.
- 3.90 Emergency stop switches shall be fitted at the top and bottom of machine.
- 3.91 Under step lighting shall be provided at the access and egress points this shall be green coloured.
- 3.92 A digital fault logger shall be provided and fitted within the inner decking.

Shaft Requirements

- 3.93 Shaft requirements detailed in this section are considered to be minimum standards where maintenance is completed from the roof of the lift car.
- 3.94 All shaft wiring shall be enclosed in trunking and conduit in strict accordance with the BS 7671 Standard Electrical specification.
- 3.95 Shaft lighting shall be Twin, 1500mm Lud type fittings which shall act as an emergency light in the event of failure of the normal lighting supply.
The minimum level of illumination under normal operation shall be 100 Lux, and the lighting shall be switched at the lift pit, the top floor, and the Motor Room. The installation shall comply with the requirements of the BS 7671 Standard Electrical specification.
In Emergency operation the lighting shall operate for a minimum duration of 3 hours.
- 3.96 An RCD protected 13 amp socket outlet shall be installed in the Lift pit.
- 3.97 In the lift pit two identical Stop Switches shall be fitted adjacent to the Landing entrance. One shall be fitted where it accessible from the Landing, and 1300mm above the sill level, with the second switch accessible from the pit floor.
- 3.98 The traction and diverter sheaves (and overhead pulleys) shall be fitted with a suitable, removable guard in full compliance with EEC Machinery Directives, and the PUWER and LOLER Regulations. All guards shall be easily removable without the need for tools to allow easy access for maintenance.
- 3.99 In the case of a shallow pit a safe working zone shall be clearly identified and be marked out in yellow paint, and a pit prop shall be provided.
A definition of a shallow pit shall be with the lift resting on full compressed buffer there shall be sufficient space in the pit to accommodate a rectangular block not less than 0.5 metres x 0.6 metres x 1 metre resting on one of its faces.
- 3.100 All shafts walls and ceilings shall be painted white, and pit floors painted red. Paint to the shaft shall be designated Class 0 in accordance with Building Regulations and shall comply with BS 476 pt 6: Fire Propagation. Paint shall be Low VOC.
- 3.101 All machinery moving parts shall be painted yellow.
- 3.102 All shafts shall be clear of any obstructions, and all voids covered.
- 3.103 Designers / Installers shall ensure safe access and egress to the lift pit. This shall be demonstrated to the University at handover.
- 3.104 The roof of the car if used for a maintenance platform shall be robust and have engineered handrails and toe boards fitted.
- 3.105 The designer / installer shall take due account of safe working around gaps between the shaft and car, and further issues such as restricted headroom's etc.
- 3.106 The car and landing door sills shall be manufactured from heavy section aluminium.
- 3.107 An Inspection light(s) shall be fitted to the car top, adjacent to the Control Station, this is in addition to the shaft lighting requirements.

Car Finish

- 3.108 Please note the car finish specified is for passenger lifts in academic buildings. Other applications for example Goods / passenger lifts in multi storey car park or in student accommodation shall require a more robust type car finish.

- 3.109 Lighting within the lift car shall be latest technology; low energy recessed spotlighting and the installation shall obtain a minimum of 200 Lux at floor level. The lights shall automatically shutdown after the lift is idle for 10 minutes. The lighting shall be agreed with the %RXUQHPRXWK8QLYH;UWMDWHV'HSDUWPHQW
- 3.110 The light fitting nearest the car operating panel shall be an emergency light which in the event of failure of the normal lighting supply will maintain the lighting for a minimum of 3 hours, at an illumination level of 20 lux throughout.
- 3.111 A toughened glass mirror shall be fitted on WKHEDFNZOOLQWKHDLIWF
Where this is not possible (on through cars) a side mirror shall be fitted.
- 3.112 Lift car walls shall be finished in veneered panels above the handrail, and linen stainless steel complete with bumper rail below the handrail. The standard and type of

Handover

3.126 The %RXUQHPRXWK 8QLYHUVLW\sharke V X O W D Q W (Q J L Q H H U notified prior to any new lift being put in to service.

3.127 At handover 2 copies of the Operation and Maintenance Manu9.024 T(8694 Tw (ate)Tj 0.694 Tw (elnte)Tj