

23.00 Lifts

All the requirements of this Section are Mandatory.

23.01 Lift Contracts

Tenders from lift contractors are to be considered on the basis of the requirement of the specification and the performance data submitted on the Tender form.

The lift shall be able to be maintained without the use of any 'special' or 'proprietary' tools or controls. If such tools or controls are required, a complete set of tools or controls shall be provided to the Principal by the date of Practical Completion. Proprietary controls will need to be modified or an alternative control considered so that maintenance is not restricted to selected industry groups or businesses. Lift companies that cannot comply with this requirement shall not be considered.

Lifts shall also be selected on the basis of the tendered life cycle costs over ten (10) years (construction plus maintenance). The Principal may exercise its absolute rights to accept or reject the maintenance contract tendered or negotiated.

23.02 Lift Dimensions

Lifts shall be suitable for people with disabilities access and use and dimensions shall be suited for horizontal stretcher access. Minimum internal dimensions shall be 1400mm wide x 2000mm deep with a minimum clear door opening width of 900mm unless otherwise approved in writing by the Superintendent. Where goods/passenger lifts are nominated on the Space Description Forms, the door/s shall be sized accordingly.

23.03 Type of Lift

Either machine room-less traction or electro-hydraulic lifts are acceptable to GU. Selection of the lift should be suited to the application.

Lifts shall have a minimum capacity of 1000kg or as otherwise noted in the project Technical Brief.

23.04 Lift Security

The facility shall be provided in all lifts to park the lift with the doors closed at the nominated floor level and to lock off access to and from any floor by means of a key switch for that floor. This panel is to be mounted on the wall adjacent to the 'call' button at the nominated floor.

Security may also be provided by access card control.

23.05 Provision for People with Disabilities

Lifts shall be designed in accordance with AS 1735.12 for use by people with disabilities.

In addition a continuous handrail shall be provided to three sides of the car and shall be positively located such that it is not subject to vandalism.

The only control panels required are those for people with disabilities and mounted on the side walls. Two control panels shall be provided in each lift.

The floor level number shall also be embossed into the door frame to provide tactile level identification for the visually impaired.

Door scanning devices shall be installed to provide additional protection from closing lift doors.

23.06 Car Protection Blanket

Each lift shall include the supply of a protective blanket for the walls of the car. The car interior shall be designed to allow easy installation of the blanket.

23.07 Finishes

Lift doors and frames shall be finished satin stainless steel for both car and landings.

Internal car finish shall be textured stainless steel to the approval of the Superintendent, to reduce the possibility of damage to the car interior. A tinted mirror shall be provided to the full width of the rear wall above the handrail.

A skirting panel of finished stainless steel shall be provided incorporating a GPO.

Refer to [Section 13.00](#) for details of the carpet finish to the car floor.

23.08 Lift Alarms

Lift motor rooms shall have alarms as required by the relevant Australian Standard.

Voltage free contacts shall be provided for the LMR alarms for connection to the CCMS by the mechanical contractor.

Machine room-less traction lifts shall be provided with an equipment 'Fault' output for connection to the CCMS by the mechanical contractor.

23.09 Lift Pits

Lift pits shall be fully tanked and provided with a dry sump.

Adequate corrosion protection shall be provided to steelwork and other corrosive materials located in the lift pit.

23.10 Lift Operation

Safety of operation shall be provided by both door edge pressure strips and 2D photo electric sensors.

Door open and door close buttons shall be provided.

Provide soft start facilities to all lifts.

23.11 Level & Direction Indicators

Level indicators shall be provided on each landing.

Direction indicators shall be provided at each landing and inside the car.

23.12 Car Audio Features

'Voice announcement' shall be provided inside the lift car and 'tone' communication shall be provided at each landing for lifts over three floors.

23.13 Car Ventilation & Lighting

Provide a fan equivalent to 'Fantech T2-150' variable speed fan to ventilate the car to Australian Standard requirements.

Lighting levels within the car shall meet the requirements of the relevant Australian Standards. Incandescent lamp sources will not be accepted.

23.14 Lift Car Access Control

A 'fire service' key switch shall be provided to all cars.

23.15 Door Frame Installation

Lift door frames shall be fully grouted into the structural opening and stand proud of the wall finishes as an architrave.

23.16 Telephone

'Alarm/Telephone' buttons and all necessary signage shall be installed in accordance with AS 1735.2.

Provide an em FONE 'hands free' automatic dialing telephone activated by the 'Alarm/Telephone' button in the car control station.

The telephone wiring is to comply with the relevant ACA requirements and be terminated at an FDP mounted in the ceiling space above the LMR door and on the external face. Provide a label to read 'FDP Above'.

Provide a label adjacent the 'hands free' telephone indicating the 'Building Name', 'Building Number' and 'Lift Identification Number'.

All lift telephones shall dial direct to the Security Office on the site/campus on which it is located.

23.17 Performance Indicators

The performance of lifts shall meet the following minimum specifications;

- Door opening time 2.5sec to 3.0sec.
- Door closing time 3.0sec to 3.5sec.
- Levelling accuracy \pm 6mm.

Lifts shall have a nominal rated speed of not less than 0.75m/s for three floors or more and not less than 0.5 m/s for floors 1 – 2. The lift shall have the capacity of 120 minimum starts per hour.

23.18 Emergency Lowering Power Pack

On sensing of 'loss of power supply' the lift shall automatically run to the nearest floor and the doors opened.

23.19 Workshop Drawings

Provide workshop drawings in sepia format in a scale of 1:20 for all aspects of the works. The Manufacturer or installation of the lift shall not take place until all relevant shop drawings have been reviewed by the Superintendent.

23.20 As Constructed' Drawings

Refer to [Section 27.00](#) for OFM's specific requirements with respect to 'As Constructed' drawings and 'Operating & Maintenance' manuals.