

9. Planned maintenance programme.
10. Any precautions necessary for ensuring Health and Safety and avoidance of misuse together with details of all emergency procedures.
11. Copies of all certificates and inspection reports relating, but not limited, to
  1. Mill certificates for the finished stainless steel used in fabrication of the cars, doors, architraves and other elements of the project.
  2. All type testing and CE marking,
  3. NICEIC tests,
  4. Tests to BS5655 Pt 10,
  5. Lifting beam tests,
  6. Suspension and governor ropes,
  7. Clause 2.70 of the specification, Painting and Cellulosing,
  8. Manuals by specialist subcontractors.
  9. The names, addresses and telephone numbers of the suppliers of all major components;
  10. Spare parts lists for components that normally need to be replaced due to fair wear and tear, together with those considered essential to maintain the lift in service, e.g. certain printed circuit boards.

**The lift shall not be deemed to have been accepted nor achieved practical completion until the drawings, maintenance manuals and Contractors Health & Safety File in accordance with CDM regulations have been received and approved.**

After submission and approval of the draft manual by the SO, three copies of hard backed maintenance and operating manuals shall be provided.

#### **2A.10 Proprietary Products**

Proprietary products, when agreed with the SO, shall in general be inspected and tested against the manufacturer's specifications and shall be furnished with a certificate of conformity or a type test certificate.

#### **2A.11 Controller: General**

The control of the lift shall be duplex full collective and fully automatic arranged for operation by passengers without an attendant and serving each floor. It shall incorporate power operated car and landing doors and indication circuits for:

1. Car position,
2. Call acceptance,
3. Lift out of service,
4. Lift undergoing maintenance,
5. Lift on car preference,
6. Electronic hall lanterns,
7. Lift overloaded,
8. Lift under firemans control.

The micro processor shall have 'field proven' components.

Floor selection shall be via a pattern generator encoder with lift position reference holes in a stainless steel tape to determine floor levels, slowing and stopping zones.

The momentary pressure on any number of car or landing pushes, activating call requirement, shall be stored in the system until answered.

The car shall answer the calls in the order in which the landings are reached and once the car has started travelling in one direction it shall answer the car and landing calls for that direction only. The lift car shall not reverse until it has answered the highest or lowest outstanding call.

With no calls on the control system, one lift shall return and park at the Ground Floor, the other lift shall remain at the last floor served.

When the car stops at the required floor in response to a car or landing call, the doors shall automatically open and automatically close after a time interval. This time interval shall be shortened by the operation of a floor push in the car.

Should a passenger wish to re-open the door, pressure on the 'Door Open' push in the car station shall reverse the motion of the doors, providing the lift has not started.

## **2A.12 Controller: Microprocessor Requirements**

1. Enclosures

The control equipment shall be mounted in a sheet steel enclosure, with lockable hinged panels for front access only. The controller shall have a clear space of 150mm to the rear for the unforeseen event that rear access may be required in the future.