

LE/02/04

2808 3651

2895 4929

10 July, 1997

All Registered Lift & Escalator Contractors

Dear Sirs,

Circular No. 9/97
Fire Prevention in Carrying Out
Lift/Escalator Works

Further to my Circular No. 8/97 on the subject, I enclose herewith a copy of the revised requirements on welding and cutting (section 7.7) issued by Labour Department (LD). This revised section would be incorporated into the Code of Practice for Safety at Work (Lift and Escalator Works) to be published by LD soon. Please observe these safety requirements whenever welding or cutting work in relation to lift/escalator works is carried out.

A copy of a "Hot Work" checklist prepared by the Lift and Escalator Contractors Association is also enclosed to facilitate your house keeping at work site.

It has been agreed in the working group meetings comprising representatives of the relevant Government departments and lift and escalator contractors associations that fire resisting temporary hoardings should be provided in circumstances where landing doors are to be removed, and scaffoldings made of non-combustible materials should be used for working in lift well. Buildings Department would soon issue Practice Notes to cover these requirements. As such, you should comply with these requirements when carrying out lift works.

The "Notice of commencement of lift works involving major alteration or lift replacement in existing building" which was issued with Circular No. 7/97 has been amended to include a clause indicating whether metal or bamboo scaffolding would be used. Please use the attached new form for notifying the relevant departments in future.

Yours faithfully,

(G.M.W. CHUI)
for Director of Electrical & Mechanical Services

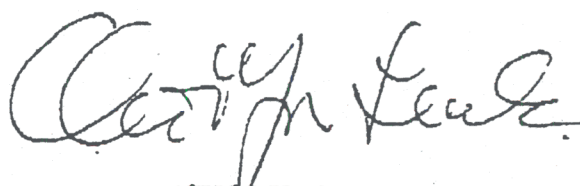
c.c. AD/BS
D of Housing (Attn.: TS/1)
C for Labour
D of Fire Services
D of Buildings

WLC/GMWC/tp

Maintenance and Replacement Works of Lift Installations

According to paragraph 11.2 of the Code of Practice for Fire Resisting Construction 1996, a door provided at a lift landing to give access to the car of a lift should have a fire resistance period (FRP) of not less than 1 hour with regard to integrity. In order to provide adequate resistance to the spread of fire, a landing door should normally remain in a closed position unless a lift car stops at the floor of the landing door.

2. For maintenance or replacement works of lift installations, it is understandable that some landing doors would need to be kept open or taken down before reinstatement. However, in the course of such works, it is necessary to observe the fire safety requirements for protecting the integrity of lift shafts in order to inhibit the spread of fire between floor compartments through the lift shafts and openings. These requirements are set out in the Appendix.
3. Authorized Persons and Registered Structural Engineers are requested to observe these requirements and to bring them to the attention of all concerned in carrying out maintenance or replacement works of the lift installations under their supervision. The requirements will be incorporated into the Code of Practice for Fire Resisting Construction issued by the Building Authority in due course.
4. A similar practice note has been issued to Registered Contractors.



(CHOI Yu-leuk)
Building Authority

Ref. : BD GR/ACT/19/L

First issued : July 1997 (AD/LM)

Index under : FRC Code
Lift Installations - Maintenance/Replacement Works

**Fire resisting construction requirements for
maintenance and replacement works of lift installations**

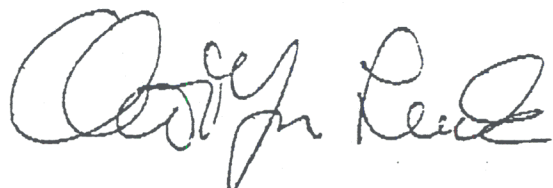
- (a) Subject to para. (b) below, all landing doors should remain in a closed position in the course of maintenance or replacement works of lift installations.
- (b) Where landing doors need to be kept open for the works, normally no more than one such door in a lift shaft should be in an opened position at any one time. The door opening, other than the one at which the lift car is levelled with the floor landing, is to be attended by lift workers. If the works necessitate more than one door in a lift shaft to be opened at the same time, the following additional conditions should be observed :
 - (i) the maximum number of landing doors to be kept open at the same time is three; and
 - (ii) no hot works or welding operations will be carried out.
- (c) Where landing doors are to be taken down, removal of more than one landing doors in a lift shaft at any one time should be avoided.
- (d) If more than one landing doors are to be removed at any one time, the door openings should be protected by temporary hoarding having an FRP of not less than one hour.
- (e) Openings in the hoarding are not allowed except small openings for ventilation of the lift shaft and access doors to the lift shaft.
- (f) Each ventilation opening should not exceed $5,500\text{mm}^2$ in area and should be located at the upper portion of the hoarding. The number of such openings should be limited to two per liftway, subject to a maximum of four in the hoarding.
- (g) Access door in the hoarding should have the same FRP as the hoarding. Such door should be self-closing and provided with locking device to prevent unauthorized access. The locking device should be so arranged that it can be readily opened from the inside without the use of a key.
- (h) Temporary hoarding to enclose a lift shaft should not be erected to cause, as far as reasonably practicable, any obstruction or reduction in width of any escape route.
- (i) Any temporary works including scaffoldings, formworks, plankings and struttings etc. erected inside a lift shaft during maintenance or replacement works should be constructed of non-combustible materials.
- (j) Arrangements should be made to ensure that all temporary openings during maintenance or replacement works are protected by either having all opened lift landing doors returned to the closed position or enclosing such openings properly with fire resisting hoarding before leaving unattended any unfinished works during lunch breaks or at the end of a day's work.

Maintenance and Replacement Works of Lift Installations

According to paragraph 11.2 of the Code of Practice for Fire Resisting Construction 1996, a door provided at a lift landing to give access to the car of a lift should have a fire resistance period (FRP) of not less than 1 hour with regard to integrity. In order to provide adequate resistance to the spread of fire, a landing door should normally remain in a closed position unless a lift car stops at the floor of the landing door.

2. For maintenance or replacement works of lift installations, it is understandable that some landing doors would need to be kept open or taken down before reinstatement. However, in the course of such works, it is necessary to observe the fire safety requirements for protecting the integrity of lift shafts in order to inhibit the spread of fire between floor compartments through the lift shafts and openings. These requirements are set out in the Appendix.

3. Registered Contractors are requested to observe these requirements and to bring them to the attention of all concerned in carrying out maintenance or replacement works of the lift installations under their supervision. The requirements will be incorporated into the Code of Practice for Fire Resisting Construction issued by the Building Authority in due course.



(CHOI Yu-leuk)
Building Authority

Ref. : BD GR/ACT/19/L

First issued : July 1997 (AD/LM)

Index under : FRC Code
Lift Installations - Maintenance/Replacement Works

**Fire resisting construction requirements for
maintenance and replacement works of lift installations**

- (a) Subject to para. (b) below, all landing doors should remain in a closed position in the course of maintenance or replacement works of lift installations.
- (b) Where landing doors need to be kept open for the works, normally no more than one such door in a lift shaft should be in an opened position at any one time. The door opening, other than the one at which the lift car is levelled with the floor landing, is to be attended by lift workers. If the works necessitate more than one door in a lift shaft to be opened at the same time, the following additional conditions should be observed :
 - (i) the maximum number of landing doors to be kept open at the same time is three; and
 - (ii) no hot works or welding operations will be carried out.
- (c) Where landing doors are to be taken down, removal of more than one landing doors in a lift shaft at any one time should be avoided.
- (d) If more than one landing doors are to be removed at any one time, the door openings should be protected by temporary hoarding having an FRP of not less than one hour.
- (e) Openings in the hoarding are not allowed except small openings for ventilation of the lift shaft and access doors to the lift shaft.
- (f) Each ventilation opening should not exceed 5,500mm² in area and should be located at the upper portion of the hoarding. The number of such openings should be limited to two per liftway, subject to a maximum of four in the hoarding.
- (g) Access door in the hoarding should have the same FRP as the hoarding. Such door should be self-closing and provided with locking device to prevent unauthorized access. The locking device should be so arranged that it can be readily opened from the inside without the use of a key.
- (h) Temporary hoarding to enclose a lift shaft should not be erected to cause, as far as reasonably practicable, any obstruction or reduction in width of any escape route.
- (i) Any temporary works including scaffoldings, formworks, plankings and struttings etc. erected inside a lift shaft during maintenance or replacement works should be constructed of non-combustible materials.
- (j) Arrangements should be made to ensure that all temporary openings during maintenance or replacement works are protected by either having all opened lift landing doors returned to the closed position or enclosing such openings properly with fire resisting hoarding before leaving unattended any unfinished works during lunch breaks or at the end of a day's work.

**Notice of commencement of lift works
involving major alteration or lift replacement
in existing building**

Date _____

To Director of Electrical & Mechanical Services
Commissioner for Labour
Director of Fire Services *¹
Director of Buildings *¹

We hereby give you notice that we have been appointed to carry out the lift works as follows:-

Location: _____

EMSD location no.: _____

Lift no(s): _____

Date of commencement of the works: _____

Planned date of completion of the works: _____

Contact person's name & tel./pager no.: _____

The works will involve:-

- (a) lift(s) replacement in existing building
- (b) breach of lift well compartmentation, e.g. removal of lift landing door(s)
- (c) conducting hot work in lift well mainly from _____
(date/time) to _____ (date/time)²
- (d) erecting metal/bamboo* scaffold in lift well³
- (e) Fireman's lift no(s): _____

The details of the major alteration are (if applicable): _____

Name & Signature of Registered Lift Contractor

- Note:
1. Also submit this notice to Director of Fire Services and Director of Buildings if the works involve item (a), (b), (c), (d) or (e).
 2. The date and time for conducting major hot work (hot work lasting for 1 day or more) should be provided separately with at least 1 working day's notice.
 3. Only scaffold constructed of non-combustible materials shall be used for lift works tendered on or after 1.8.1997.
 4. This notice should be received by relevant Government departments at least 14 days before commencement of the works if the works involve item (a), (b), (c), (d) or (e).
 5. A location plan indicating the position(s) of the lifts(s) should be provided together with this notice.

- Tick if applicable
* Delete if inapplicable

**Notice of conducting major hot work in lift well
for lift major alteration or lift replacement
in existing building**

Date _____

To Director of Electrical & Mechanical Services (Fax no. 2895 4929)
Commissioner for Labour (Fax no. 2544 3497)
Director of Fire Services (Fax no. 2723 2197)
Director of Buildings (Fax no. 2877 6416)

Location: _____

EMSD location no.: _____

Lift no(s): _____

Date & time of commencement of major hot work¹: _____

Date & time of completion of major hot work: _____

Hot work supervisor's name: _____ tel.: _____

pager: _____

mobile tel.: _____

Contact person's name: _____ tel.: _____

pager: _____

mobile tel.: _____

Name & Signature of Registered Lift Contractor

- Note:
1. Major hot work means hot work lasting for 1 day or more.
 2. Registered lift contractors should submit this notice to the above Government departments at least 1 working day before commencement of the major hot work. In any event, prior notice must be given.

Reply Slip

To: Director of Electrical & Mechanical Services
(Attn.: Mr. L.C. Wong - Lift & Escalator Subdivision)
Fax No.: 28954929

Seminar on New Requirements for
Fire Prevention in Carrying out Lift Works
to be held on 14 August 1997

We would/would not* attend the captioned seminar. The number of our
representatives is _____.

Signature of Contact Person

Name of Contact Person

Tel. no. of Contact Person

Name of Organisation/
Company/Department

Date

* delete as appropriate