NB-LIFTS RECOMMENDATIONS FOR USE SHEETS (RfUs) CONSIDERED AS ENDORSED STATUS ON SEPTEMBER 2016

Number NB-L/REC (1)	Version (V.)	Keywords	Approved by NB-L on (2)	Endorsed by Lifts Committee by WP/OP on (3)
0 Organizational Questions				
0/003	06	CAP, final inspection, NB, unit verification	13/11/12	16/08/13
0/004	10	CAP; NB; Final inspection, Format of report	20/05/14	03/11/14
0/005	03	European data base, withdrawn certificates, NB, Member states	21/11/07	28/04/08
1 Safety Components				
1/001	03	Conformity Assessment Procedure (CAP), Safety device, Type examination, Test procedure	19/01/00	31/12/00
1/002	06	CAP, Safety component, Type examination, Certificate	21/05/13	11/12/13
1/003	03	CAP, Safety component, Type examination, manufacturing procedures	19/01/00	31/12/00
1/005	05	Electric safety devices, Type examination	05/06/00	13/09/07
1/007	03	CAP, safety component, rupture valve, Sealing of adjustment	19/01/00	31/12/00
1/008	02	UCM	13/11/12	16/08/13
1/010	05	Acceptance of Reports and Certificates issued by installers or their subcontractors	19/05/15	13/01/16
1/011	03	Model lift, (safety) components, (EC)-type examination certificate, revision	19/05/15	13/01/16
2 Lifts				
2/001	18	Machinery Directive, ESR	21/05/13	11/12/13
2/002	06	Lifts, ESR, Stopping accuracy, CAP	19/01/00	23/04/07
2/003	05	Lifts, EMC-Directive, CAP	18/11/15	30/06/16
2/004	03	NB, Lift, CE-marking, identification number	12/11/98	31/12/00
2/005	07	CAP, Brake, test	23/05/07	13/09/07
2/007	05	CAP, Lift, Model lift, Certificate	23/05/00	05/06/00
2/008	05	CAP, (Conformity assessment procedure), Certificate, Model lift, NB (notified body), Type examination, two landings	18/11/15	30/06/16
2/010	04	NB; CAP; Certificate; remark on Annex I, 2.2	22/11/06	23/04/07
2/011	07	Rescue operation	18/11/15	30/06/16
2/012	11	procedures and equipment for inspection, examination and testing	18/11/15	30/06/16
2/013	07	Driving unit in the well	18/11/15	30/06/16
2/014	06	Activities by one person only	18/11/15	30/06/16
2/017	07	Leaving the pit	23/05/07	13/09/07
2/018	04	CAP, Landing doors, fire resistance,	21/11/06	23/04/07

Number NB-L/REC (1)	Version (V.)	Keywords	Approved by NB-L on (2)	Endorsed by Lifts Committee by WP/OP on (3)
		Certificates		
2/019	02	Emergency operation; Manual / Electrical / 400 N	23/05/06	23/04/07
2/020	02	Impact risks	23/05/06	23/04/07
2/021	02	Alarm device – two way communication system	21/11/06	23/04/07
2/024	09	MRL Penthouse version, criteria	20/05/14	03/11/14
2/025	04	Electric appliance, machine-room, temperature limit-exceeding	03/11/09	10/02/10
2/026	05	The procedure of the examination of suspension media which are not according EN 81-1/2:1998	03/11/09	13/04/10
2/027	04	Climate control, well, ventilation systems	20/05/14	03/11/14
3 Systems according to Annexes VIII, IX, XII, XIII and XIV (of Directive 95/16/EC)				
3/001	05	CAP, NB, Lift, Annex XIII, Assessment	09/05/00	31/12/00
3/002	05	CAP, NB, Safety component, Annex IX, Assessment	09/05/00	31/12/00
3/006	07	CAP; NB; Systems; Design inspection	05/07/01	23/04/07
3/007	03	CAP, NB, Systems, Modification	19/01/00	31/12/00
3/008	08	CAP, NB, Systems	04/07/01	23/04/07
3/009	05	CAP, NB, Systems, Certificate, Design inspection, Content of certificate	09/05/00	23/04/07
3/010	03	Annex XI, random check, module c, safety components, verification, conformity to type	21/11/07	28/04/08
3 Systems according to Annexes VI, VII, X, XI and XII (of Directive 2014/33/EU)				
3/004	06	CAP, NB, Systems	18/11/15	30/06/16
3/005	08	CAP, NB, Systems, Certificate, Content of certificate	18/11/15	30/06/16
3/012	06	CAP, final inspection, subcontracting	18/11/15	30/06/16

(1) : NB-L/REC x/xxx/V.y = Notified Bodies-Lifts / R: Recommendation for Use E: English version C: Coordination group of Notified Bodies for Lifts x: Numbering of the RfUs / V.: Version y: index of the Version

(2) : NB-L = Coordination group of Notified Bodies for Lifts - Directive 2014/33/EU

(3) : WP/OP = Written Procedure / Oral Procedure

NB-LIFT	**NB-L CO-ORDINATION OF NOTIFIED BODIES LIFTS DIRECTIVE 95/16/EC**	**NB-L/REC 0/003 version: 6 date: 21.10.2013**

NB-L RECOMMENDATION FOR USE

Keywords: CAP, final inspection, NB, unit verification	**Proposed by HC on 1997-10-8, Decided by NB-L/HC on 2000-01-19, Modified by NB-L/HC on 2012-11-13**
	StC: to be endorsed by WP X done on 16.08.2013 by OP ☐ done on
related to Directive: 95/16/EC **Article: 8 (2) Annex: VI, X, XII, XIII, XIV Clause:**	**prEN/EN:** **Clause:**

Question:

What is the range of examinations and tests to be carried out on an installed lift before putting it into service?

Answer:

The range of examinations and tests to be carried out on an installed lift before putting it into service is shown in the enclosed documents NB-L/002/99V03 and NB-L/033/98V03.

History: decision of NB-L/HC (2nd meeting), proposals of NB-L/AH-FI, adoption by NB-L/HC (6th meeting), adopted by StC, editorially amended to new format of REC 01-07.04, updated in October 2012 by NB-L/AH-FI and approved at the 30th NB-L meeting in November 2012.

According to the "Rules of Procedure", clause 2.7, it is expected that Notified Bodies take recommendations into consideration

NB-LIFT	**NB-L CO-ORDINATION OF NOTIFIED BODIES LIFTS DIRECTIVE 95/16/EC**	**NB-L/REC 0/004 version: 10 date: 15.01.2015**

NB-L RECOMMENDATION FOR USE

Keywords: CAP; NB; Final inspection, Format of report	**Proposed by AH-FI on 15.03.2001, Decided by NB-L/HC on 04.07.2001, Modified by NB-L/HC on 20.05.2014**
	StC: to be approved by WP X done on 03.11.2014 by OP ☐ done on
related to Directive: 95/16/EC Article: 8 (2) Annex: Clause:	**prEN/EN: Clause:**

Question:

How can be shown that the range of examinations and tests to be carried out on an installed lift before placing it onto the market and putting it into service has completely been done?

Answer:

A format of reports for examinations and tests to be carried out on an installed lift before placing it onto the market and putting it into service is given by the enclosed documents NB-L/013/2000 and NB-L/014/2000 rev. 02-2014.

The check-lists are available only in the English language.

History: decision of NB-L/HC in its 4th meeting, proposals from AH-FI, consideration by NB-L/HC in its 8th meeting, editorial amendments by AH-FI, decided by NB-L/HC in its 9th meeting, discussed and approved at the 18th meeting, discussed again on request of the StC by NB L/HC and approved by NB L/HC in its 19th meeting; updated according to EN 81-1+A3 and EN 81-2+A3, EN 81-21, EN 81-71 and EN 81-73 and discussed and approved at the 26th NB-L meeting, updated considering EN 81-28 by adding Appendix H and references to it on pages 2, 3, 16 and 17 of NB-L/013/2000 and on pages 2, 3, 18 and 19 of NB-L/014/2000 in February 2014 and approved at the 33rd NB-L meeting.

According to the "Rules of Procedure", clause 2.7, it is expected that Notified Bodies take recommendations into consideration

REPORT

ABOUT

EXAMINATIONS AND TESTS
ON AN INSTALLED
ELECTRIC LIFT

CARRIED OUT IN ACCORDANCE WITH
Lifts Directive, Annexes VI, X, XII, XIII and XIV

to establish conformity with the provisions of the Lifts Directive

The installation is based on

☐ a lift with EC Type examination (Art. 8 (2) i & ii)

☐ design of a type in accordance with Annex XIII (Art. 8 (2) iii)

☐ With or ☐ Without Design Examination

☐ a lift with Unit Verification (Art. 8 (2) iv)

☐ design in accordance with Annex XIII (Art. 8 (2) v)

☐ With or ☐ Without Design Examination

IDENTIFICATION OF THIS REPORT

This Test Report is composed by 31 pages and the following Annexes:

- ☐ Annex A : Additional Requirements for Unit Verification
- ☐ Annex B1 : Machinery inside the well : working area in the car or car roof
- ☐ Annex B2 : Machinery inside the well : working area in the pit
- ☐ Annex B3 : Machinery inside the well : working area on a platform
- ☐ Annex B4 : Working area outside the well
- ☐ Annex B5 : Machinery outside the well
- ☐ Annex B6 : Specific checks with respect to EN 81-1 + A3
- ☐ Annex C : Additional requirements for lifts designed according to EN 81-70
- ☐ Annex D : Additional requirements for lifts designed according to EN 81-72
- ☐ Annex E : Additional requirements for lifts designed according to EN 81-21
- ☐ Annex F : Additional requirements for lifts designed according to EN 81-73
- ☐ Annex G : Additional requirements for lifts designed according to EN 81-71
- ☐ Annex H : Alarm System according to EN 81-28

INTRODUCTION

1. It is the purpose of this report to be used as a means to facilitate the proof of having carried out the necessary examinations and tests to show the compliance with the Lifts Directive before putting a new lift into service.

2. According to practice in Europe, details of the compliance with the Lifts Directive are related to fulfilling the requirements of the Harmonised Standard EN 81-1:1998 + A2/2004. + A3/2009 Therefore this report is based on the requirements of this standard. The drafting committee for this report consider that the limited tests and examinations described in Annex D2 of EN81-1:1998 + A2/2004 + A3/2009 and included in this report are not sufficient on their own to verify compliance with the harmonised standard. Furthermore the tests and examinations in this report are intended to ensure that the requirements of Annex D1 are also satisfied. This does not exclude other solutions, provided the same safety level has been reached.
   Some Annexes are provided to verify lifts designed according to the following standards : EN 81-21, EN 81-70, EN 81-71, EN 81-72, EN 81-73, EN 81-28.

3. The format of this report does not specify how the examinations or tests have to be carried out. It is assumed that the examinations and tests are carried out in accordance with approved engineering practice (state of the art) and, where necessary, with instruments being in line with the provisions in the relevant approved QM-system.

4. The sequence of examinations and tests stated within this report have been arranged for the safety of the person conducting the test. Each stage once completed successfully helps to increase the level of safety of the following tests.

5. This document has been compiled by a group of experts representing manufacturers and notified bodies (NB). This work was requested by the NB-L/HC in its meeting 99-05-11/12 and further amendments at the meeting dated 04-05-26/27.

6. Attention shall be paid to possible differences in the lift installation due to national regulations not touched by the LD.

7. This report should be retained by the Notified Body and/or the Installer carrying out these tests

Documents Required

The following documentation may be required in order for the person conducting the tests to be able to fully complete the rest of this report. :-

General description of the lift installation if not already included in this document

Architectural plans with regard to the shaft, machinery or pulley room, landings and access to these areas (clearly dimensioned)

User Handbook

- Mechanical general arrangement drawings
- Electrical circuit diagrams
- Instructions for use of the lift
- Maintenance instructions
- Requirements for periodic inspections
- Logbook for registration of all maintenance and alterations
- Emergency procedures
- EC declarations of conformity of relevant safety components as listed in Annex IV of the Lifts Directive (95/16/EC) or a list from which these may be identified.

Certification

- Quality Assurance Certification (If applicable)
- EC Type Examination of Model Lift / Lift
- Notified Body Design Examination for deviations from Harmonised Standards
- Fire Rating Certification for Landing Doors (National Requirement)
- Testing/Suitability of Glass Panels
- Rope and Chain Certificates
- Alarm device according to EN 81-28 (e.g. statement of compliance by manufacturer)

Information

- Type Tested Safety Components ~ range of use, correct installation procedures and special testing procedures.
- National Regulations which need to be respected.
- Contract specific negotiations, such as accessibility for certain groups of users (the handicapped / the elderly). Whilst conformity with these items is not the responsibility of the Notified Bodies they may effect the design of the lift and therefore its compliance with the Lifts Directive.
- Risk Analysis in the case of Unit Verification.

Note : The drawings and circuit diagrams used for the installation and testing process may be subject to minor alteration due to changes in site conditions. It should be noted that “as built” drawings are required as part of the handover documentation to be provided to the owner of the lift.

The EMC conformity should be confirmed during the test.

In the following document shaded areas shown thus denote tests which must be carried out on site. Any box which is not shaded allows for the installer to provide the examiner with this information prior to the tests being carried out providing that they have the necessary Quality Assurance system. If the installer has no recognised Quality Assurance system then all tests must be conducted on site.

Electric Lift	**Identification of this Report:**

In the case of Final Inspection (annex vi) or similar the following information shall be provided :

- EC Type Examination Certificate
- Document providing equivalent information to the Type Examination Certificate in case of Article 8 (2) iii
- Design Examination Certificate

Lift Installer Details Responsible For Design

Name:
Address:

Notified Body No.
(where applicable)

Lift Installer Details

Name:
Address:

Notified Body No.
(where applicable)

Notified Body Carrying Out Inspection

Name:
Address:

Notified Body No.
(where applicable)

Location of Installed Lift

Name:
Address:

* Lift Identification No.	
*Lift Type (Model)	
* Year of Manufacture	

* The above details to be taken from the installers plate inside the car.

1 Description of the Lift Installation

1.1 Length of travel		m	
1.2 No of levels served	Total		
1.3 No of landing doors	Front		
	Rear		
	Side		
1.4 Rated load		kg	Persons
1.5 Rated speed		m/s	
1.6 Machine room location (at which level)	Above well		
	Below well		
	Side of well		
	Remote		
	Other		
1.7 Counterweight Position	Side of Car		
	Rear of Car		
1.8 Mass of Counterweight		Kg	
1.9 Mass of Empty Car		Kg	

1.10 Plan(s) of the well and machine/pulley room : Drawing No.(s)

1.11 Electric Circuit Diagram(s) Drawing No.(s)

1.12 Confirm that the plans or other documents contains information relating to :- Yes No

Loads and forces imposed on the building
Indication of the well enclosure
Dimensions of pit and headroom
Location of the machinery and pulley spaces and access to them
Accessible spaces underneath the well
Fixation points of guide rails

1 Description of the Lift Installation (continued)

1.13 Power supply:

Specified	Actual at time of test	
V		Voltage
		Phase
Hz		Hz
		Wire (3,4 or 5)
		Fuse Type
A	A	Fuse Rating

1.14 Specifications relating to negotiations

Duration of fire rating of landing doors				min
Fire Fighting Lift	Yes		No	
Accessibility for Disabled	Yes		No	
Vandal Resistance	Yes		No	
Other (specify) :-	Yes		No	

1.15 Verification of Conformity

The following are items not fully conforming to the Harmonised Standard EN81-1:1999

Design Inspection	N/A		Approval No.	
Refuge Space approval by Member State (annex 2.2)	N/A		Approval No.	

1.16 List Of Used Safety Components

			EC Type Examination Certificate No.	Notified Body No.
Device for Locking Landing Door				
Device to prevent the lift car from falling (safety gear)				
Overspeed Limitation Device (speed governor)				
Buffers - Energy Accumulation – Non Linear (car)	N/A			
- Energy Accumulation – Non Linear (cwt)	N/A			
- Energy Accumulation – Buffered Return (car)	N/A			
- Energy Accumulation – Buffered Return (cwt)	N/A			
- Energy Dissipation (car)	N/A			
- Energy Dissipation (cwt)	N/A			
Device to prevent uncontrolled upwards movement				
Electric Safety Switches containing electronic components	N/A			

2.0 Machine and Pulley Spaces

2.1 Main Switch Specified A

(a) Confirm that the main switch is in accordance with that specified Yes ☐ No ☐

(b) Confirm that the main switch control mechanism is easily identifiable and accessible from the machine room doorway (see 13.4.2 of EN 81-1) Yes ☐ No ☐

(c) Confirm that it is lockable in the OFF position (See 13.4.2 of EN 81-1) Yes ☐ No ☐

2.2 Lighting & Socket Outlets Lux Rating

Confirm that this conforms to 6 and 13.6 of EN. 81-1 Yes ☐ No ☐

2.3 Dimensions

Confirm these are in accordance with the minimum figures in 6.3.2 of EN.81-1 Yes ☐ No ☐

2.4 Access

Confirm there is safe access as defined in 6.2 of EN.81-1 Yes ☐ No ☐

2.5 Safety Signs

Confirm that notices and signs are in place according to 15.4 of EN.81-1 Yes ☐ No ☐

2.6 Lift Machine Manufacturer Type Specified

Confirm that the correct lift machine is supplied Yes ☐ No ☐

2.7 Controller Type Manufacturer Type Specified

Confirm that the correct controller is supplied Yes ☐ No ☐

2.8 Emergency Release

(a) Confirm that the emergency operation system(s) function(s) correctly in accordance with 12.5 of EN.81-1 Yes ☐ No ☐

(b) Confirm that the instructions called for in 15.4.3 of EN.81-1 are displayed Yes ☐ No ☐

2.9 Machine Room Ventilation

Confirm that the machine is room ventilated as called for in 6.3.5 of EN.81-1 Yes ☐ No ☐

2.0 Machine and Pulley Room (continued)

2.10 Doors/Trap Doors

Confirm that the machine room doors or trap doors are fitted with a suitable lock and of the correct size and construction (see 6.3.3 of EN.81-1) Yes ☐ No ☐

2.11 Communication

Confirm that there is a communication device in place and working as called for in 14.2.3.4.of EN.81-1(for lift travel > 30m) N/A ☐ Yes ☐ No ☐

2.12 Openings into the well

Confirm that protection against objects and/or persons falling into the well from the machine room has been provided (see 6.3.4of EN.81-1) N/A ☐ Yes ☐ No ☐

2.13 Lifting Accessories

Confirm that, where necessary, means for lifting heavy components are available and correctly marked (see 6.3.7 of EN.81-1) N/A ☐ Yes ☐ No ☐

2.14 Multiple Lifts

Confirm that where multiple lifts have been installed into a common machine room components have been marked identifying the lift to which the components belong (see 15.15 of EN.81-1) N/A ☐ Yes ☐ No ☐

2.15 Confirm the safety chain has been tested to ensure that an earth fault will cause disconnection without delay (14.1.1.1.d of EN.81-1) Yes ☐ No ☐

2.16 Confirm that the phase reversal protection functions correctly (14.1.1.1.j of EN.81-1) Yes ☐ No ☐

2.17 Confirm that there is no equipment not related to the safe operation of the lift in these spaces (6.1.1 of EN.81-1) Yes ☐ No ☐

3.0 The Well

3.1 Clearances and run-bys

(a) Is the slowdown of the machine monitored ? N/A ☐ Yes ☐ No ☐
(see 5.7.1.3 and 12.8 of EN.81-1)

(b) Is there fitted an anti-rebound device? N/A ☐ Yes ☐ No ☐
(see 5.7.1.4 of EN.81-1)

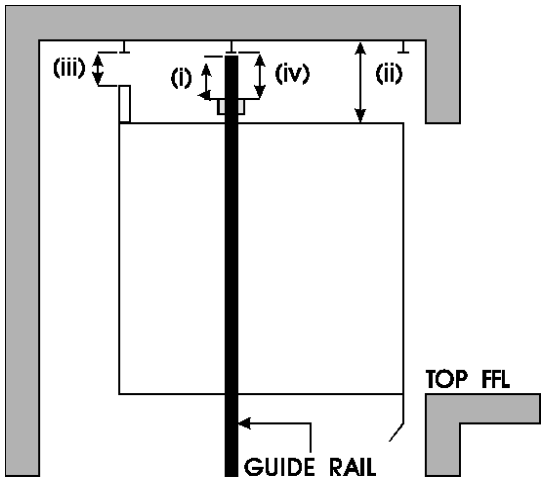
NOTE : In (c) & (d) below $h=0.035v^2$ which may be reduced in the circumstances given in 5.7.1.3 and 5.7.1.4 of EN 81-1

(c) With the counterweight resting on its fully compressed buffers confirm with reference to Fig. 1 that :

	Specified	**Measured Distance**
(i) The rail lengths will accommodate a further guided travel of at least (0.1+ h) m (see 5.7.1.1a of EN.81-1)	m	m
(ii) The dimension from the standing area on the car roof to the lowest part of the ceiling of the well above this area is at least (1.0+ h) m. (see 5.7.1.1.b of EN.81-1)	m	m
(iii) The free vertical distance between the lowest part of the ceiling of the well and the highest item of equipment on the car roof (excluding (iv) below) is at least (0.3+ h) m (see 5.7.1.1.c.1 of EN.81-1)	m	m
(iv) The free vertical distance between the lowest part of the ceiling of the well and the highest part of the guide shoes/rollers, rope attachments/header or parts of vertically sliding doors should be at least (0.1+ h) m (see 5.7.1.1.c.2 of EN.81-1)	m	m

Confirm that there is sufficient space above the car to accommodate a rectangular block 0.5m x 0.6m x 0.8m (see 5.7.1.1.d of EN 81-1) Yes ☐ No ☐

Figure 1



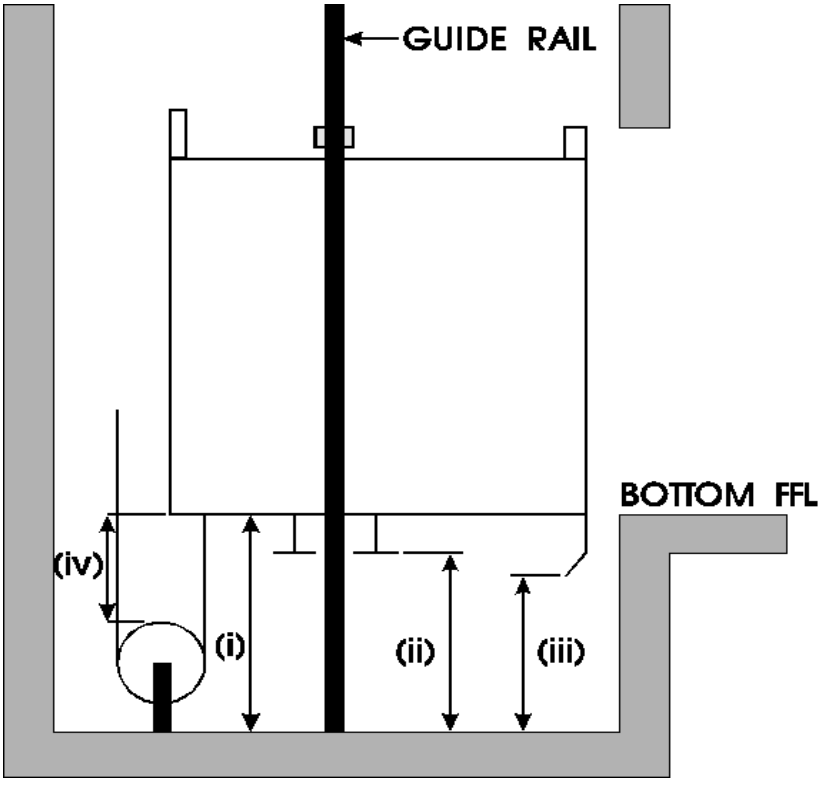
3.0 The Well (continued)

	Specified	Measured Distance
(d) With the car resting on its fully compressed buffers confirm that the further guided travel of the counterweight is at least (0.1+ h) m. (see 5.7.1.2 of EN.81-1)	m	m

(e) When the car rests on its fully compressed buffers confirm (see Fig.2) there is:

(i) Sufficient space below the car to accommodate a rectangular block 0.5m x 0.6m x 1.0m (see 5.7.3.3.a of EN.81-1), resting on one of its faces.	Yes ☐	No ☐
(ii) A free vertical distance between the bottom of the pit and the lowest part of the car (excluding the area in (iii) below) of at least 0.5m (see 5.7.3.3.b of EN.81-1)	m	m
(iii) A free vertical distance of not less than 0.1m within a horizontal distance of 0.15m between (1) the apron or parts of the vertical sliding door and adjacent walls and (2) the lowest parts of the car and the guide rails. (see 5.7.3.3.b of EN 81-1).	m	m
(iv) Except for items in (iii) above, a free vertical distance between highest parts in the pit and the lowest part of the car of at least 0.3m. (see 5.7.3.3.c of EN.81-1)	m	m

Figure 2



3.0 The Well (continued)

3.2 Reduced Stroke Buffering

Confirm that the terminal speed reduction system ensures that buffer impact is appropriate to the stroke of the buffer (see 10.4.3.2.of EN.81-1)

N/A ☐ Yes ☐ No ☐

3.3 Buffers

3.3.a Car Buffers

Specified

Confirm that the car buffers are in accordance with what is specified

Number Installed ☐

Yes ☐ No ☐

3.3.1 Energy Accumulation Buffers

When the car with its rated load is placed on the buffer(s), the ropes being made slack, confirm that the compression corresponds to that given by the characteristic curve of the buffer (as provided by the buffer supplier or lift supplier): (see Annex D.2.l of EN 81-1).

N/A ☐ Yes ☐ No ☐

3.3.2 Energy Accumulation Buffers (Non-Linear Type)

Confirm that the buffer has been CE marked

N/A ☐ Yes ☐ No ☐

3.3.3 Energy Dissipation Buffers (Oil Type)

When the car with its rated load is brought into contact with the buffer at the speed for which the buffer is designed (see 10.4.3 of EN 81-1) confirm that no deterioration occurs to the lift.

N/A ☐ Yes ☐ No ☐

Confirm that the buffer has been CE marked

Yes ☐ No ☐

3.3.b Counterweight Buffers

Specified

Confirm that the counterweight buffers are in accordance with what is specified

Number Installed ☐

Yes ☐ No ☐

3.0 The Well (continued)

3.3.4 Energy Accumulation Buffers

When the counterweight with empty car is placed on the buffer(s) the ropes being made slack, confirm that the compression corresponds to that given by the characteristic curve of the buffer (as provided by the buffer supplier or lift supplier) (see Annex D.2.l.1 of EN 81-1). N/A ☐ Yes ☐ No ☐

3.3.5 Energy Accumulation Buffers (Non-Linear Type)

Confirm that the buffer has been CE marked N/A ☐ Yes ☐ No ☐

3.3.6 Energy Dissipation Buffers (Oil Type)

When the counterweight with its rated load is brought into contact with the buffer at the speed for which the buffer is designed (see 10.4.3 of EN 81-1) confirm that no deterioration occurs to the lift. N/A ☐ Yes ☐ No ☐

Confirm that the buffer has been CE marked Yes ☐ No ☐

3.4 Protection in the well

(a) Confirm that in the case of a fully enclosed well there are no gaps in the enclosure other than those listed in 5.2.1.1 of EN.81-1 N/A ☐ Yes ☐ No ☐

(b) Confirm that a rigid counterweight screen has been fitted and that the counterweight is a minimum of 50mm clear of the car (see 5.6.1 and 11.3 of EN.81-1) Yes ☐ No ☐

(c) Confirm that in the case of adjacent lifts there is a screen in the pit extending to a height of 2.5m above the lowest landing floor (see 5.6.2.1 of EN 81-1) N/A ☐ Yes ☐ No ☐

(d) Confirm that when the horizontal distance between the edge of the car roof and any moving parts of adjacent lifts are less than 0.5m there is a full height screen (see 5.6.2.2 of EN.81-1) N/A ☐ Yes ☐ No ☐

(e) Confirm that the inspection doors and inspection traps fulfil the requirements of 5.2.2 of EN 81-1 N/A ☐ Yes ☐ No ☐

(f) Confirm that the access to the pit fulfils the requirements of 5.7.3.2 of EN 81-1 Yes ☐ No ☐

(g) Confirm In the case of partially enclosed wells imperforate screening in accordance with figure 1 of 5.2.1.2 of EN 81-1 has been provided N/A ☐ Yes ☐ No ☐

(h) Confirm that all other requirements of 5.2.1.2 of EN 81-1 have been satisfied N/A ☐ Yes ☐ No ☐

3.0 The Well (continued)

(i) Confirm that any ventilation provided conforms to 5.2.3 of EN.81-1 Yes ☐ No ☐

(j) Confirm that the wall facing the car entrance conforms with the requirements of 5.4.3 of EN.81-1 Yes ☐ No ☐

(k) Confirm that there are no objects/services in the well except for those associated with the lift (see 5.8 of EN.81-1) Yes ☐ No ☐

(l) Confirm that if there are accessible areas under the pit suitable precautions have been taken. (see 5.5 of EN.81-1) N/A ☐ Yes ☐ No ☐

(m) Confirm that rotating pulleys in the well have been guarded (see 9.6 of EN.81-1) N/A ☐ Yes ☐ No ☐

(n) Confirm that the final limit switches are correctly positioned and operate satisfactorily (10.5 of EN.81-1) Yes ☐ No ☐

(o) Confirm that the stopping device in the pit has been positioned correctly and proved (5.7.3.4 and 14.2.2.1 of EN81-1) Yes ☐ No ☐

(p) Confirm that the well meets the requirements of 5.3 of EN81-1, particularly in the case of glass Yes ☐ No ☐

3.5 Landing Door Assemblies

(a) Confirm that the running clearance between the door panels and between panels and uprights, lintels or sills is less than or equal to 6mm (7.1 of EN.81-1) Yes ☐ No ☐

(b) Confirm that no recess or projection on the face of power operated automatic sliding door panels exceeds 3mm (7.5.1 of EN.81-1) N/A ☐ Yes ☐ No ☐

(c) Is a fire test certificate required, if so is it available, complete and correct? N/A ☐ Yes ☐ No ☐

(d) If the answer to (c) is Yes are the landing doors correctly fire rated for the installation? Specified: Makers Type ☐

Rating ☐ min

Yes ☐ No ☐

(e) Confirm that where glass panels (excluding vision panel) are used they are correctly marked in accordance with clause 7.2.3.5 of EN.81-1 NA ☐ Yes ☐ No ☐

(f) Confirm that where glass panels (excluding vision panel) are used they conform in size and fixing to annex J of EN.81-1or have a pendulum test certificate available, complete and correct. NA ☐ Yes ☐ No ☐

(g) Confirm that one of the options for child protection in 7.2.3.6 of EN.81-1 has been adopted N/A ☐ Yes ☐ No ☐

(h) Confirm that vertically sliding doors conform to the requirements of 7.4.3 and 7.5.2.2 of EN.81-1 N/A ☐ Yes ☐ No ☐

3.0 The Well (continued)

3.6 Landing Door Locks

(a) Confirm that the correct door locks are fitted (see **1.16**) Yes ☐ No ☐

(b) Confirm that all the door locks are CE marked Yes ☐ No ☐

(c) Confirm that the contacts at each landing door have been proved so that when broken they stop and prevent movement of the car outside the unlocking zone (7.7.4 of EN.81-1) Yes ☐ No ☐

(d) Confirm that the mechanical locks at each landing door have been proved for positive locking (7.7.5 of EN.81-1) Yes ☐ No ☐

(e) Confirm that all electrical safety devices on the landing door panels, which are not directly mechanically linked, operate correctly (see 7.7.6.2 of EN.81-1). N/A ☐ Yes ☐ No ☐

3.7 Lighting and Socket Outlet

(a) Confirm that the well lighting level is in accordance with 5.9 and 13.6 of EN.81-1 lux ☐ Yes ☐ No ☐

(b) Confirm Are the terminal light fittings less than 0.5m from the pit floor and ceiling (see 5.9 of EN.81-1) Yes ☐ No ☐

(c) Confirm that the lights can be switched from both the pit and machine room (see 13.6.3.2 of EN.81-1) Yes ☐ No ☐

(d) Confirm that an electrical outlet socket has been provided in the pit (see 5.7.3.4 of EN.81-1) Yes ☐ No ☐

3.8 Car and Counterweight Guide Rails

		Specified	Actual
(a) Is the designation of the guide rails in accordance with that specified?	Car		
	Cwt		

(b) Confirm the pitch of the rail fixings is in accordance with the layout drawing
Car Yes ☐ No ☐
Cwt Yes ☐ No ☐

(c) Confirm that where the guides are lubricated it is in accordance with the EC type test certification of the safety gear N/A ☐ Yes ☐ No ☐

4.0 The Car, Inspection Operation & Entrance Clearances

4.1 The Car

		Specified	Actual
(a) Confirm that the available floor area, related to rated load and maximum number of passengers, conforms to 8.2 of EN.81-1		m^2	m^2
(b) Confirm that the inside of the car is at least 2.0m in height		Yes ☐	No ☐
(c) Confirm that where glass panels are used, each panel is correctly marked in accordance with 8.3.2.4 of EN.81-1			
(1) Doors	N/A ☐	Yes ☐	No ☐
(2) Walls	N/A ☐	Yes ☐	No ☐
(d) Confirm that where glass panels are used a handrail conforming to 8.3.2.2 of EN81-1 has been fitted.	N/A ☐	Yes ☐	No ☐
(e) Confirm that one of the options for child protection in 8.6.7.5 of EN 81-1 has been adopted	N/A ☐	Yes ☐	No ☐
(f) Confirm that the maximum load and makers name is indicated in the car (i.e. Number of persons load in kg and identification no.) and it complies with 15.2.1 and 15.2.2 of EN.81-1		Yes ☐	No ☐
(g) Confirm that the emergency alarm device allows for two-way communication with a rescue service according to EN 81-28 (See Annex H)		Yes ☐	No ☐
(h) Confirm that the lighting in the car gives a minimum of 50 lux at floor level and on the controls (see 8.17.1 of EN.81-1)		Yes ☐	No ☐
(i) Confirm that the emergency lighting in the car stays illuminated for at least 1h. (see 8.17.4 of EN.81-1)		Yes ☐	No ☐
(j)Confirm that the car overload device operates in accordance with clause 14.2.5 of EN.81-1		Yes ☐	No ☐
(k) Confirm that the apron conforms to 8.4 of EN.81-1		Yes ☐	No ☐
(l) Confirm that any emergency doors or trap door comply with 8.12 of EN 81-1	N/A ☐	Yes ☐	No ☐
(m) Confirm that ventilation has been provided in the car (see 8.16 of EN 81-1)		Yes ☐	No ☐
(n) Confirm that the car walls are imperforate except for ventilation apertures (see 8.16 of EN 81-1)		Yes ☐	No ☐

4.0 The Car, Inspection Operation & Entrance Clearances (continued)

4.2 Car Top

(a) Confirm that the car top has been fitted with controls, stopping devices and socket outlet in accordance with 8.15 of EN.81-1 — Yes ☐ No ☐

(b) Confirm that the car top station is constructed and operates in accordance with 14.2.1.3 of EN 81-1 — Yes ☐ No ☐

(c) Confirm that the alarm device in 5.10 of EN.81-2 operates Correctly (see Annex H) — N/A ☐ Yes ☐ No ☐

Specified: ☐

(d) Confirm that the balustrade on the car roof is in accordance with 8.13.3 of EN 81-1 — N/A ☐ Yes ☐ No ☐

(e) Confirm that the car roof has one clear area for standing (see 8.13.1 of EN.81-1) — Yes ☐ No ☐

(f) Confirm that any pulleys have been guarded (see 9.7 of EN.81-1) — Yes ☐ No ☐

(g) Confirm that the roof of the car has been designed to take the weight of two persons — Yes ☐ No ☐

Note :- Only where visual inspection suggests non-compliance should the car roof be subjected to further examination)

(h) Confirm that the stopping devices on the car top have been positioned correctly and proved so that when operated they stop and prevent movement of the car (8.15.b and 14.2.2.1 of EN81-1) — Yes ☐ No ☐

4.0 The Car, Inspection Operation & Entrance Clearances (continued)

4.3 Car Entrance Clearances

(a) Confirm that the running clearance between the door panels and between panels and uprights, lintels or sills is less than or equal to 6mm (8.6.3 of EN.81-1) Yes ☐ No ☐

(b) Confirm that no recess or projection on the face of power operated automatic sliding door panels exceeds 3mm (8.7.1 of EN.81-1) N/A ☐ Yes ☐ No ☐

(c) Confirm that the horizontal distance between the sill of the car and the sill of the landing doors is 35mm or less (see 11.2.2 of EN.81-1) Yes ☐ No ☐

(d) Confirm that where there is a hinged landing door and a folding car door the clearances between them do not exceed 150mm (see 11.2.4 of EN.81-1) N/A ☐ Yes ☐ No ☐

(e) Is the distance between the inner surface of the well and the sill or framework of the car entrance or door 0.15m or less, or 0.2m if over a height not exceeding 0.5m? (11.2.1 of EN.81-1) Yes ☐ No ☐

(f) If the answer to (e) is NO, is the car door mechanically locked when away from the unlocking zone in accordance with 11.2.1. c of EN.81-1)? N/A ☐ Yes ☐ No ☐

4.4 Landing and Car Door Tests

Note: Where appropriate, the following tests should be carried out with the car and landing doors coupled.

If the doors are manual answer f, h, i, j, k, l, m, n Front ☐ Alternate ☐

If the doors are power operated answer all except n, Front ☐ Alternate ☐

(a) Confirm the maximum force to prevent closing is 150N or less (7.5.2.1.1.1/8.7.2.1.1.1 of EN.81-1) Yes ☐ No ☐

(b) Confirm that with a mechanical force of 150N the clearances defined in 7.1 of EN.81-1 do not exceed 30mm for side opening doors or 45mm for centre opening doors (7.2.3.2 of EN.81-1) Yes ☐ No ☐

(c) Confirm that the kinetic energy is 10J or less (see 7.5.2.1.1.2/8.7.2.1.1.2 of EN.81-1) Yes ☐ No ☐

(d) Confirm that all the protective devices reverse the doors in accordance with 7.5.2.1.1.3/8.7.2.1.1.3 of EN.81-1) N/A ☐ Yes ☐ No ☐

(e) Confirm that if the doors are able to close with the reversal device inoperative the kinetic energy is less than or equal to 4J (see 7.5.2.1.1.3/8.7.2.1.1.3 of EN 81-1) N/A ☐ Yes ☐ No ☐

4.0 The Car, Inspection Operation & Entrance Clearances (continued)

(f) Confirm that the unlocking zone is 0.2m or less above and below landing levels (or 0.35 in the case of simultaneously operated car and landing doors (7.7.1 of EN.81-1)		Yes ☐	No ☐
(g) Confirm that the automatic self closing mechanism functions correctly (7.7.3.2 of EN.81-1)		Yes ☐	No ☐
(h) Confirm that each set of landing doors is capable of being unlocked from the outside with an emergency key (7.7.3.2 of EN.81-1)		Yes ☐	No ☐
(i) Confirm that the car doors can be manually opened within the unlocking zone with a force of less than 300N with the power off (8.11.2 and Annex B of EN.81-1)		Yes ☐	No ☐
(j) Confirm that in the case of folding doors the maximum force to prevent opening is 150N or less (8.7.2.1.1.4 of EN.81-1)	N/A ☐	Yes ☐	No ☐
(k) Confirm that for vertical sliding doors the requirements of 7.5.2.2.(a), (b) and (d)/8.7.2.2 (b), (c) and (d) of EN 81-1 have been met	N/A ☐	Yes ☐	No ☐
(l) Confirm that if fitted the car door lock functions correctly (8.9.3 of EN.81-1)	N/A ☐	Yes ☐	No ☐
(m) Confirm that the car door contacts have been proved so that when broken there is no car movement outside the unlocking zone (8.9 of EN.81-1)		Yes ☐	No ☐
(n) Confirm that the car here indication conforms to 7.6.2 of EN.81-1 for manual doors	N/A ☐	Yes ☐	No ☐

5.0 Suspension, Compensation, Braking & Traction

5.1 Suspension

(a) Suspension ropes N/A ☐

(1) Number Specified ☐

(2) Nominal diameter Specified ☐ mm

(3) Lay and construction Specified ☐

(4) **Confirm** that the correct ropes are supplied and that the rope test certificate is available, complete and correct
(A copy is sufficient as original will be held by the rope maker) Yes ☐ No ☐

Rope Terminations

(5) Type of termination Car ☐ Well ☐

Cwt ☐

(6) **Confirm** that the rope terminations are correctly made and secure as required in 9.2.3 of EN.81-1 Yes ☐ No ☐

(7) **Confirm** that the rope terminations conform to 9.5 of EN.81-1 ensuring distribution of load between the ropes Yes ☐ No ☐

(b) Suspension chains N/A ☐

(1) Number Specified ☐

(2) Nominal Pitch Specified ☐ mm

(3) Type and construction Specified ☐

(4) **Confirm** that the correct chains are supplied and that the chain test certificate is available, complete and correct.
(A copy is sufficient as original will be held by the chain maker) Yes ☐ No ☐

(5) **Confirm** that the chain terminations conform to 9.2.5 of EN.81-1 ensuring distribution of load between the chains Yes ☐ No ☐

(c) Confirm that in the case of two rope/chain suspension the slack rope/chain safety device operates correctly.
(see 9.5.3 of EN 81-1) N/A ☐ Yes ☐ No ☐

5.0 Suspension, Compensation, Braking & Traction (continued)

5.2 Compensation

(a) Confirm that compensation is required Yes ☐ No ☐

(b) If the answer to (a) is Yes, confirm it is of the correct type (see 9.6 of EN81-1) Specified ☐ Alternate ☐

(c) Confirm that the electrical safety device on the anti-rebound device operates correctly. (see 9.6.2 of EN81-1) N/A ☐ Yes ☐ No ☐

5.3 Traction/Braking Checks

(a) Confirm that the brake stops the lift car when the supply is interrupted with 125% load in the car and at rated speed (see Annex D.2.h.2 of EN 81-1) Yes ☐ No ☐

(b) Confirm that the car stops under emergency conditions:

(1) With the car empty, when travelling upwards at rated speed in the upper part of the well (see Annex D.2.h.1.a of EN 81-1) Yes ☐ No ☐

(2) With 125% rated load, when travelling downwards at rated speed in the lower part of the well (see Annex D.2.h.1.b of EN 81-1) Yes ☐ No ☐

(c) Confirm that the car cannot be raised when the counterweight is brought into contact with the buffer (see Annex D.2.h.2 of EN 81-1) Yes ☐ No ☐

Note: This test may be performed with the car empty at any speed between zero and inspection speed.

(d) Confirm that the overbalance is correct (see Annex D.2.h.3 of EN 81-1) Specified ☐ Yes ☐ No ☐

6.0 Controls

(a) Confirm the levelling and relevelling circuits operate correctly (see 14.2.1.2 of EN 81-1) N/A ☐ Yes ☐ No ☐

and

Confirm that the stopping accuracy is according to EN 81-70. N/A ☐ Yes ☐ No ☐

(b) Confirm that the docking operation functions in accordance with 14.2.1.5.b of EN 81-1 N/A ☐ Yes ☐ No ☐

(c) Confirm the operation of the stopping device in the car (see 14.2.1.5.i of EN 81-1) N/A ☐ Yes ☐ No ☐

(d) Confirm that the electrical slowdown system operates correctly including any non-electrical device. (see 12.8.4.c of EN 81-1) N/A ☐ Yes ☐ No ☐

(e) Confirm that safety circuits containing electronic components are CE marked N/A ☐ Yes ☐ No ☐

7.0 Car & Counterweight Safety Gear & Overspeed Protection

7.1 Car Safety Gear

(a) Confirm that the correct safety gear is supplied (see **1.16**) Yes ☐ No ☐

(b) Confirm that the safety gear has been CE marked Yes ☐ No ☐

(c) Confirm that the safety gear stops the car in the downward direction when operated by the governor and engaging at the appropriate speed with the load uniformly distributed at:

- rated load at rated speed in the case of instantaneous safety gear (see Annex D.2.j.1 of EN 81-1) N/A ☐ Yes ☐ No ☐

- 125% of rated load at rated speed or lower in the case of progressive safety gear (see Annex D.2.j.2 of EN 81-1) N/A ☐ Yes ☐ No ☐

(d) Confirm that the floor of the lift is horizontal or sloping less than 5% from the horizontal (9.8.7 of EN.81-1) Yes ☐ No ☐

(e) Following the test confirm that no deterioration which could adversely affect the normal use of the lift has occurred (see Annex D.2.j of EN 81-1) Yes ☐ No ☐

(f) Confirm that the electrical safety device operates correctly Yes ☐ No ☐

7.0 Car & Counterweight Safety Gear & Overspeed Protection (continued)

7.2 Car Governor

(a) Confirm that the correct overspeed governor is supplied (see **1.16**) Yes ☐ No ☐

(b) Confirm that the overspeed governor tripping speed is correct (see 9.9.1 of EN.81-1) Yes ☐ No ☐

(c) Confirm the overspeed governor has been CE marked Yes ☐ No ☐

(d) Confirm that the overspeed governor is accessible or is able to be remotely tested and reset. (see 9.9.8 of EN.81-1) Yes ☐ No ☐

(e) Confirm that the electrical safety device on the overspeed governor operates correctly Yes ☐ No ☐

(f) Confirm that the electrical safety device on the overspeed governor prevents the lift from restarting if the governor is not self resetting N/A ☐ Yes ☐ No ☐

(g) Confirm that the electrical safety device detecting breakage or slack in the overspeed governor safety rope operates correctly Yes ☐ No ☐

(h) Confirm that the governor, if adjustable, is sealed N/A ☐ Yes ☐ No ☐

		Specified		
(i) Confirm that the correct rope type is supplied and the rope certificate is available, complete and correct	Make /Type		Yes ☐	No ☐

7.3 Counterweight Safety Gear N/A ☐

(a) Confirm that the correct safety gear is supplied

		Specified		
Progressive :	Make /Type		Yes ☐	No ☐
Instantaneous :	Make /Type		Yes ☐	No ☐

(b) Confirm that the safety gear has been CE marked Yes ☐ No ☐

(c) Confirm that the safety gear stops the counterweight in the downward direction when operated and engaging at the appropriate speed and with the car empty of load:

- at rated speed in the case of instantaneous safety gear (see Annex D.2.k.1 of EN 81-1) Yes ☐ No ☐

- at rated speed or lower in the case of progressive safety gear (see Annex D.2.k.2 of EN 81-1) Yes ☐ No ☐

(d) Following the test confirm that no deterioration which could adversely affect the normal use of the lift has occurred (see Annex D.2.k of EN 81-1) Yes ☐ No ☐

7.0 Car & Counterweight Safety Gear & Overspeed Protection (continued)

7.4 Counterweight Governor

N/A ☐

(a) Confirm that the correct overspeed governor is supplied — Specified Make /Type ☐ Yes ☐ No ☐

(b) Confirm that the overspeed governor tripping speed is correct (see 9.9.3 of EN.81-1) — Yes ☐ No ☐

(c) Confirm the overspeed governor has been CE marked — Yes ☐ No ☐

(d) Confirm that the overspeed governor is accessible or is able to be remotely tested and reset. (see 9.9.8 of EN.81-1) — Yes ☐ No ☐

(e) Confirm that the electrical safety device on the overspeed governor device operates correctly — Yes ☐ No ☐

(f) Confirm that the electrical safety device on the overspeed governor prevents the lift from restarting if the governor is not self resetting — N/A ☐ Yes ☐ No ☐

(g) Confirm that the electrical safety device detecting breakage or slack in the overspeed governor safety rope operates correctly — Yes ☐ No ☐

(h) Confirm that the governor, if adjustable, is sealed — N/A ☐ Yes ☐ No ☐

(i) Confirm that the correct rope type is and the rope certificate is available, complete and correct. — Specified Make /Type ☐ Yes ☐ No ☐

7.5 Ascending Car Protection

(a) Confirm the correct ascending car overspeed protection has been provided (see **1.16** of this document and 9.10 of EN 81-1) — Yes ☐ No ☐

(b) Confirm that the protective device has been CE marked — Yes ☐ No ☐

(c) Confirm that the device functions correctly with the car ascending at not less than 115% of rated speed (9.10.1 of EN.81-1) — Yes ☐ No ☐

(d) Confirm that the electrical safety device on the means of protection operates correctly (see 9.10.5 of EN.81-1) — Yes ☐ No ☐

(e) Following the test confirm that no deterioration which could adversely affect the normal use of the lift has occurred — Yes ☐ No ☐

(f) Confirm that where the speed monitoring device is not an overspeed governor it conforms to 9.10.10 of EN.81-1 — Yes ☐ No ☐

8.0 Measurement of the Electrical System

(a) Is the mains current within the limit specified ? Specified ____ A Actual ____ A
(See Annex D.2.e of EN.81-1)

(b) Measure and record the following operational data when the car is at mid-point of travel.
(See Annex D.2.e of EN.81-1)

Note : In addition to speed it may be necessary to measure current or voltage on some drive types

Car Loading Condition		Rated Speed m/s	* Levelling Speed N/A ☐ m/s	Re-levelling Speed N/A ☐ m/s	Inspection Speed m/s	Emergency Operation Speed N/A ☐ m/s	Docking Operation Speed N/A ☐ m/s
EN.81-1 Clause No.		12.6	14.2.1.2	14.2.1.2	14.2.1.3	14.2.1.4	14.2.1.5
Empty	Up						
	Dn						
Balanced **	Up						
	Dn						
Rated	Up						
	Dn						

* with advance door opening
** the balanced load down speed shall be within +5% of the rated speed

(c) Confirm that the measured rated speed does not exceed the design rated speed by more than 5% (see 12.6 of EN 81-1) Yes ☐ No ☐

(d) Confirm that the maximum levelling deviation is within the manufacturers tolerances Specified ____ Actual ____

9.0 Protective Devices

9.1 Lift Motor Windings

Is motor protection provided (see 13.3 of EN 81-1) N/A ☐ Yes ☐ No ☐

9.2 Door Motor Winding

Is motor protection provided (see 13.3 of EN 81-1) N/A ☐ Yes ☐ No ☐

9.3 Main Power Converter

Is protection provided (see 13.3 of EN 81-1) N/A ☐ Yes ☐ No ☐

9.4 Motor Run Time Limiter

Confirm that the correct motor run time limiter is supplied and operates correctly (12.10 of EN.81-1) Yes ☐ No ☐

9.5 Lighting and Socket Outlet Protection

Confirm that the lighting and socket electrical supply is separate to that of the lift machine and that these circuits have there own independent short circuit protection (see 13.6.1 and 13.6.3.3 of EN.81-1 Yes ☐ No ☐

10.0 Electrical Wiring Examination

10.1 Insulation Resistance to Earth

Confirm that the insulation resistance to earth for the electrical system is correct and in accordance 13.1.1.1.a and b and 13.1.3 of EN.81-1 (see also Annex D.2.f.1) Yes ☐ No ☐

10.2 Earthing

Confirm that all metal work is properly earthed back to the lift main earthed isolator. (see Annex D.2.f.2 in EN 81-1) Yes ☐ No ☐

10.3 Electrical Wiring

(a) Confirm that the electrical conductors, including travelling cables, conform to 13.5 of EN.81-1 Yes ☐ No ☐

(b) Confirm that the wiring installed (for EMC compliance) is in accordance with the manufacturers instructions Yes ☐ No ☐

(c) Confirm that the controller components are labelled in accordance with the wiring diagram (see 15.10 of EN.81-1) Yes ☐ No ☐

(d) Confirm that the controller and other electrical equipment are protected against direct contact with enclosures of at least IP2X Yes ☐ No ☐

11.0 Documentation

(a) Confirm that there is a register as called for in 16.2 of EN.81-1 Yes ☐ No ☐

(b) Confirm that there is an instruction manual as called for in 16.3 of EN 81-1, EN 81-70, EN 81-72 giving also information about normal operation, rescue operation, periodical inspection procedures, etc. Yes ☐ No ☐

(c) Confirm that where the lift deviates from the Harmonised Standard a design examination certificate has been provided N/A ☐ Yes ☐ No ☐

(d) Confirm that where the lift is a Model Lift an EC type examination certificate has been provided N/A ☐ Yes ☐ No ☐

12.0 Confirmation of compliance with the Standard EN 81-1

(a) Are all the items associated with the lift installation, for which the lift manufacturer is not directly responsible, in a suitable state for the installation to be put into service? e.g. access to lift machine room, telephone line, access lighting etc.

Yes ☐ No ☐

NOTE: Some of the items requiring attention may not be part part of the contract for the lift but part of the installation and the responsibility of others.

If No provide details :

(b) Confirm that all the tests and examinations have been carried out successfully to prove compliance with EN.81-1. Where the lift requires additional tests to prove compliance with Notified Body Design Examination Certificates confirm that these have also been completed, the results of which should be attached to these test results.

Yes ☐ No ☐

Where any previous question in this report has led to a answer of "NO" indicate the reasons and further actions necessary to achieve compliance

Note : Before signing this report ensure that every question has been answered

Signature		Name		Position	
Company		Date			

Name and address of the Branch Office making the examination

Note : Completion of this document does not, in itself, constitute authority to place the lift into service

Annex A – Additional Requirements For Unit Verification

The following describes additional tests and verification necessary when validating lift installations in accordance with Annex X of the Lifts Directive 95/16/EC.

A.1 – Documentation and Design

A.1.1 Confirm that calculations for the following are available, complete and correct :-

Loads imposed on the building by the lift components e.g. Guide Brackets, Buffers, Gear Supporting Steelwork, etc. (see EN81-1 Clause 5.3)		Yes ☐	No ☐
Selection of car guide rail size and distance between supports. (see EN81-1 Clause 10.1 and Annex G)		Yes ☐	No ☐
Proof of traction and need for compensation (see EN81-1 Clause 9.3, 9.6 and Annex M)		Yes ☐	No ☐
Selection of Suspension Rope and Terminations (see EN81-1 Clause 9.2.2 , 9.2.3 and Annex N)	N/A ☐	Yes ☐	No ☐
Selection of Suspension Chain and Terminations (see EN81-1 Clause 9.2.4, 9.2.5 and Annex N)	N/A ☐	Yes ☐	No ☐
Selection of Overspeed Governor Rope / Safety Rope (see EN81-1 Clause 9.9.6)	N/A ☐	Yes ☐	No ☐
The design of the car sling		Yes ☐	No ☐
The design of the compensation rope tensioning device	N/A ☐	Yes ☐	No ☐
A.1.2 Confirm that documentation and test results are available and in order for any glass used in the construction of the car or car and landing doors. (see EN81-1 Clause 7.2.3.3, 8.3.2.2, 8.6.7.2 and Annex J)	N/A ☐	Yes ☐	No ☐
A.1.3 Confirm that Certificates of Type Examinations according to annex v(a) or annex ix are available for the installed safety components listed in Annex iv of the Lifts Directive 95/16/EC.	N/A ☐	Yes ☐	No ☐
A.1.4 Confirm that where the lift is not in complete conformity with EN81-1 a Risk Assessment has been carried out to show that the equivalent level of safety has been achieved for the new/alternative lift equipment.	N/A ☐	Yes ☐	No ☐
A.1.5 Confirm that where installed the counterweight safety gear and its means of tripping are compatible and in accordance with EN.81-1 Clause 9.8.1.2	N/A ☐	Yes ☐	No ☐

A.2 Safety Components

A.2.1 Confirm that the following have been selected, in accordance with the contract, so that they provide the level of safety required by the Harmonised Standard EN.81-1:1999, and that where appropriate they are compatible.

Device for Locking Landing Door (see EN.81-1 Clause 7.7.3)		Yes ☐	No ☐
Device to prevent the lift car from falling (safety gear) (see EN.81-1 Clause 9.8)	N/A ☐	Yes ☐	No ☐
Overspeed Limitation Device (speed governor) (see EN.81-1 Clause 9.10.2)	N/A ☐	Yes ☐	No ☐
Buffers - Energy Accumulation – Non Linear (see EN.81-1 Clause 10.4.1.2)	N/A ☐	Yes ☐	No ☐
- Energy Accumulation – Buffered Return (see EN.81-1 Clause 10.4.2)	N/A ☐	Yes ☐	No ☐
- Energy Dissipation (see EN.81-1 Clause 10.4.3)	N/A ☐	Yes ☐	No ☐
Ascending Car Overspeed Protection (see EN.81-1 Clause 9.10)	N/A ☐	Yes ☐	No ☐
Electric Safety Switches containing electronic components (see EN.81-1 Clause 14.1.2.3)	N/A ☐	Yes ☐	No ☐
A.2.2 Confirm that all of the relevant safety switches listed in EN.81-1 Clause 14.1.2 and Annex A have been provided and correctly used and identified in accordance with the wiring diagram for the lift	☐	Yes ☐	No ☐

A.3 Control Systems

A.3.1 Confirm that the levelling and re-levelling operations have been designed and operate in accordance with EN.81-1 Clause 14.2.1.2	N/A ☐	Yes ☐	No ☐
A.3.2 Confirm that the inspection operations have been designed and operate in accordance with EN.81-1 Clause 14.2.1.3		Yes ☐	No ☐
A.3.3 Confirm that the emergency electrical operation has been designed and operates in accordance with EN.81-1 Clause 14.2.1.4	N/A ☐	Yes ☐	No ☐
A.3.4 Confirm that the docking operations have been designed and operate in accordance with EN.81-1 Clause 14.2.1.5	N/A ☐	Yes ☐	No ☐
A.3.5 Confirm that where reduced stroke buffering is used the device used to monitor the normal slowing of the lift conforms to EN.81-1 Clause 12.8	N/A ☐	Yes ☐	No ☐
A.3.6 Confirm that where vertical sliding doors have been used the control system complies with EN.81-1 Clause 7.5.2.2	N/A ☐	Yes ☐	No ☐

A.4 Protective Devices

A.4.1 Confirm that the motor over current protection has been designed in accordance with EN.81-1 Clause 13.3

Yes ☐ No ☐

A.5 Negotiations

A.5.1 Confirm that the supplied lift as described within this test report is in compliance with that described in the agreed technical specification, negotiated between the lift manufacturer and their client.

Yes ☐ No ☐

A.6 Details of Examiner

Note : Before signing this report ensure that every question has been answered

Signature		Name		Position	
Company		Date			

Name and address of the Branch Office making the examination	

Note : Completion of this document does not, in itself, constitute authority to place the lift into service

Appendix B1 : Machinery inside the well - Working area in the car or the car roof

Access

Confirm that the door providing access to the working area is according to the requirements listed in clause 6.4.7.1 of EN 81-1/A2.	NA	☐	Yes	☐	No	☐

Construction

Confirm that any kind of uncontrolled and unexpected car movement resulting from maintenance/inspection is prevented by a suitable mechanical device (see clause 6.4.3.1 of EN 81-1/A2).			Yes	☐	No	☐
Confirm that the active position of the mechanical block is monitored by an electrical safety device according to 14.1.2 (see clause 6.4.3.1 of EN 81-1/A2).			Yes	☐	No	☐
Confirm that when the car is blocked, it is possible to leave the working area easily and safely (see clause 6.4.3.1 of EN 81-1/A2 and NBL REC 2/016).			Yes	☐	No	☐

Emergency and test operation

Confirm that the devices for emergency and tests operations are provided on a panel(s) suitable to carrying out from outside of the well all emergency operations and any necessary dynamic tests of the lift (see clause 6.6.1 of EN 81-1/A2).			Yes	☐	No	☐
Confirm that the cover is provided with a key-operated lock, capable of being reclosed and relocked without a key.	NA	☐	Yes	☐	No	☐
Confirm that the panel(s) is inaccessible to unauthorised persons (see clause 6.6.1 of EN 81-1/A2).			Yes	☐	No	☐
Confirm that if the emergency and tests devices are not protected inside a machinery cabinet, they are enclosed with a suitable cover according to clause 6.6.1 of EN 81-1/A2.	NA	☐	Yes	☐	No	☐
Confirm that the panel includes the emergency operation device according to 12.5 and an intercom system according to 14.2.3.4 (see clause 6.6.2 of EN 81-1/A2).			Yes	☐	No	☐
Confirm that the panel have equipment which enables dynamic tests to be carried out (see clause 6.6.1 of EN 81-1/A2).			Yes	☐	No	☐
Confirm that the panel is provided with a vision panel for a direct observation of the lift machine or a display, according to clause 6.6.2 of EN 81-1/A2.			Yes	☐	No	☐
Confirm that the devices on the panel are lit with an intensity of at least 50 lux (see clause 6.6.3 of EN 81-1/A2).			Yes	☐	No	☐
Confirm that the working area in which is installed the panel(s) is in accordance with 6.3.3.3 of EN 81-1/A2.			Yes	☐	No	☐

Emergency operation

Confirm that if the effort required to move the car in the upward direction with its rated load does not exceed 400 N, the machine is provided with a manual means of emergency operation in accordance to clause 12.5.1 of EN 81-1/A2.	NA	☐	Yes	☐	No	☐
Confirm that the manual means is designed and monitored according to clause 12.5.1.1 of EN 81-1/A2.	NA	☐	Yes	☐	No	☐
Confirm that it is possible to check easily whether the car is an unlocking zone (see clause 12.5.1.2 of EN 81-1/A2).			Yes	☐	No	☐
Confirm that if the effort required to move the car in the upward direction with its rated load exceeds 400 N a means of emergency electrical operation is provided in accordance with clause 12.5.2 of EN 81-1/A2.	NA	☐	Yes	☐	No	☐
Confirm that means of emergency electrical operation is in accordance with clause 14.2.1.4 of EN 81-1/A2	NA	☐	Yes	☐	No	☐

Stopping device

Confirm that a stopping device(s) is installed according to the requirements of clause 14.2.2 of EN 81-1/A2.			Yes	☐	No	☐

Instructions

Confirm that the instruction manual gives the necessary information about the normal use of the lift and rescue operation (see clause 16.3.1 of EN 81-1/A2 and relevant NBL Recommendations).			Yes	☐	No	☐

Appendix B2 : Machinery in the well - Working area in the pit

Access

Confirm that the door providing access to the working area is according to the requirements listed in clause 6.4.7.1 of EN 81-1/A2.	NA	☐	Yes	☐	No	☐

Construction

Confirm that a device is provided to mechanically stop the car to create a free distance of at least 2 m between the floor of the working area and the lowest part of the car (see clause 6.4.4.1 of EN 81-1/A2).			Yes	☐	No	☐
Confirm that the device to create the free distance is designed according to the points b), c), d) e), f), g), h) of the clause 6.4.4.1 of EN 81-1/A2.			Yes	☐	No	☐
Confirm that when the car is in the position according to 6.4.4.1 a), it is possible to leave the working area easily and safely (see clause 6.4.4.2 of EN 81-1/A2 and NBL REC 2/017).			Yes	☐	No	☐

Emergency and test operation

Confirm that the devices for emergency and tests operations are provided on a panel(s) suitable for carrying out from outside of the well all emergency operations and any necessary dynamic tests of the lift (see clause 6.4.4.3 of EN 81-1/A2).			Yes	☐	No	☐
Confirm that the cover is provided with a key-operated lock, capable of being reclosed and relocked without a key.	NA	☐	Yes	☐	No	☐
Confirm that the panel(s) is inaccessible to unauthorised persons (see clause 6.6.1 of EN 81-1/A2).			Yes	☐	No	☐
Confirm that if the emergency and tests devices are not protected inside a machinery cabinet, they are enclosed with a suitable cover according to clause 6.6.1 of EN 81-1/A2.	NA	☐	Yes	☐	No	☐
Confirm that the panel includes the emergency operation device according to 12.5 and an intercom system according to 14.2.3.4 (see clause 6.6.2 of EN 81-1/A2).			Yes	☐	No	☐
Confirm that the panel have equipment which enables dynamic tests to be carried out (see clause 6.6.1 of EN 81-1/A2).			Yes	☐	No	☐
Confirm that the panel is provided with a vision panel for a direct observation of the lift machine or a display, according to clause 6.6.2 of EN 81-1/A2.			Yes	☐	No	☐
Confirm that the devices on the panel are lit with an intensity of at least 50 lux (see clause 6.6.3 of EN 81-1/A2).			Yes	☐	No	☐
Confirm that the working area in which is installed the panel(s) is in accordance with 6.3.3.1 of EN 81-1/A2.			Yes	☐	No	☐

Emergency operation

Confirm that if the effort required to move the car in the upward direction with its rated load does not exceed 400 N, the machine is provided with a manual means of emergency operation in accordance to clause 12.5.1 of EN 81-1/A2.	NA	☐	Yes	☐	No	☐
Confirm that the manual means is designed and monitored according to clause 12.5.1.1 of EN 81-1/A2.	NA	☐	Yes	☐	No	☐
Confirm that it is possible to check easily whether the car is in an unlocking zone (see clause 12.5.1.2 of EN 81-1/A2).			Yes	☐	No	☐
Confirm that if the effort required to move the car in the upward direction with its rated load exceeds 400 N a means of emergency electrical operation is provided in accordance with clause 12.5.2 of EN 81-1/A2.	NA	☐	Yes	☐	No	☐
Confirm that means of emergency electrical operation is in accordance with clause 14.2.1.4 of EN 81-1/A2	NA	☐	Yes	☐	No	☐

Stopping device

Confirm that a stopping device(s) is installed according to the requirements of clause 14.2.2 of EN 81-1/A2.			Yes	☐	No	☐

Instructions

Confirm that the instruction manual gives the necessary information about the normal use of the lift and rescue operation (see clause 16.3.1 of EN 81-1/A2 and relevant NBL Recommendations).			Yes	☐	No	☐

Appendix B3 : Machinery in the well - Working area on a platform

Access

Confirm that the door providing access to the working area is according to the requirements listed in clause 6.4.7.1 of EN 81-1/A2). NA ☐ Yes ☐ No ☐

Construction

Confirm that the platform is permanently installed and retractable if it is in the travel path of the car, the counterweight or the balancing weight (see clause 6.4.5.1 of EN 81-1/A2). NA ☐ Yes ☐ No ☐

Confirm that if the platform is located in the travel path of the car, the counterweight or the balancing weight, the car shall be stationary by using a mechanical device or, if the car needs to be moved, the travel path of the car is limited by movable stops according to clause 6.4.5.2 of EN 81-1/A2. NA ☐ Yes ☐ No ☐

Confirm that the car is stopped: NA ☐ Yes ☐ No ☐

- At least 2 m above the platform if the car runs down towards the platform;
- Below the platform in compliance with 5.7.1.1 b), c) and d) if the car runs up towards the platform.

Confirm that the platform has adequate mechanical resistance, is provided with a balustrade in conformity with 8.13.3, and the vertical distance between the lower part of the platform and the level of access does not exceed 0,50 m (see clause 6.4.5.3 of EN 81-1/A2). Yes ☐ No ☐

Confirm, in the case of retractable platform, that the fully retracted position is monitored using an electrical safety device (see clause 6.4.5.4 of EN 81-1/A2). NA ☐ Yes ☐ No ☐

Confirm, in the case of retractable platform, that the platform is provided with a manually or power operated device for putting into or removing from the working position, from outside of the well or from the lift pit (see clause 6.4.5.4 of EN 81-1/A2). NA ☐ Yes ☐ No ☐

Confirm that the movable stops are provided with buffers in conformity with 10.3 and 10.4 (see clause 6.4.5.5 of EN 81-1/A2). NA ☐ Yes ☐ No ☐

Confirm that the positions of the movable stops are monitored with electrical safety device in accordance with clause 6.4.5.5 b) and c) . NA ☐ Yes ☐ No ☐

Confirm that the movable stops automatically operate when the platform is placed in working position (see clause 6.4.5.5) of EN 81-1/A2). NA ☐ Yes ☐ No ☐

Confirm that when the movable stops are in the intended position, an additional final limit switch operates before the car, the counterweight or the balancing weight comes into contact with the movable stops (see clause 6.4.5.6 of EN 81-1/A2). NA ☐ Yes ☐ No ☐

Confirm that when it is necessary to move the car from the platform an inspection control station is provided in accordance with 6.4.5.6 of EN 81- NA ☐ Yes ☐ No ☐

1/A2.

Emergency and test operation

Confirm that the devices for emergency and tests operations are provided on a panel(s) suitable to carrying out from outside of the well all emergency operations and any necessary dynamic tests of the lift (see clause 6.6.1 of EN 81-1/A2).			Yes	☐	No	☐
Confirm that the panel(s) is inaccessible to unauthorised persons (see clause 6.6.1 of EN 81-1/A2).	NA	☐	Yes	☐	No	☐
Confirm that if the emergency and tests devices are not protected inside a machinery cabinet, they are enclosed with a suitable cover according to clause 6.6.1 of EN 81-1/A2.	NA	☐	Yes	☐	No	☐
Confirm that the cover is provided with a key-operated lock, capable of being reclosed and relocked without a key.	NA	☐	Yes	☐	No	☐
Confirm that the panel includes the emergency operation device according to 12.5 and an intercom system according to 14.2.3.4 (see clause 6.6.2 of EN 81-1/A2).	NA	☐	Yes	☐	No	☐
Confirm that the panel have equipment which enables dynamic tests to be carried out (see clause 6.6.1 of EN 81-1/A2).	NA	☐	Yes	☐	No	☐
Confirm that the panel is provided with a vision panel for a direct observation of the lift machine or a display, according to clause 6.2.2 of EN 81-1/A2.	NA	☐	Yes	☐	No	☐
Confirm that the devices on the panel are lit with an intensity of at least 50 lux (see clause 6.6.3 of EN 81-1/A2).	NA	☐	Yes	☐	No	☐
Confirm that the working area in which is installed the panel(s) is in accordance with 6.3.3.3 of EN 81-1/A2.	NA	☐	Yes	☐	No	☐

Emergency operation

Confirm that if the effort required to move the car in the upward direction with its rated load does not exceed 400 N, the machine is provided with a manual means of emergency operation in accordance to clause 12.5.1 of EN 81-1/A2.	NA	☐	Yes	☐	No	☐
Confirm that the manual means is designed and monitored according to clause 12.5.1.1 of EN 81-1/A2.	NA	☐	Yes	☐	No	☐
Confirm that it is possible to check easily whether the car is in an unlocking zone (see clause 12.5.1.2 of EN 81-1/A2).	NA	☐	Yes	☐	No	☐
Confirm that if the effort required to move the car in the upward direction with its rated load exceeds 400 N a means of emergency electrical operation is provided in accordance with clause 12.5.2 of EN 81-1/A2.	NA	☐	Yes	☐	No	☐
Confirm that means of emergency electrical operation is in accordance with clause 14.2.1.4 of EN 81-1/A2.	NA	☐	Yes	☐	No	☐

Stopping device

Confirm that a stopping device(s) is installed according to the	NA	☐	Yes	☐	No	☐

requirements of clause 14.2.2 of EN 81-1/A2.

Instructions

Confirm that the instruction manual gives the necessary information about the normal use of the lift and rescue operation (see clause 16.3.1 of EN 81-1/A2 and relevant NBL Recommendations).	NA	☐	Yes	☐	No	☐

Appendix B4 – Machinery inside the well - Working area outside the well

Access

Confirm that the access to the machinery is possible only by a door/trap in conformity with clause 6.4.7.2 of EN 81-1/A2.	Yes ☐	No ☐
Confirm that when the door/trap is open, protection means are provided to prevent the access of unauthorised persons into dangerous area (see clause 6.4.7.2 of EN 81-1/A2).	Yes ☐	No ☐
Confirm that the passage ways are not obstructed by the open door/trap and the protection means are in accordance with national building legislation (0.3.17 of EN 81-1/A2).	Yes ☐	No ☐

Instructions

Confirm that the instruction manual gives the necessary information about the normal use of the lift and rescue operation (see clause 16.3.1 of EN 81-1/A2 and relevant NBL Recommendations).	Yes ☐	No ☐

Appendix B5 - Machinery outside the well

General provisions

Confirm that the machinery spaces outside the well are so constructed to withstand the loads and the forces to which they are intended to be subjected (see clause 6.5.1 of EN 81-1/A2). Yes ☐ No ☐

Construction

Confirm that the machinery is located inside a cabinet (see clause 6.5.2.2 of EN 81-1/A2). Yes ☐ No ☐

Confirm that the cabinet consists of imperforate walls, floor, roof and door(s) (see clause 6.5.2.2 of EN 81-1/A2). Yes ☐ No ☐

Confirm that the door(s) have sufficient dimensions, do not open towards the inside of the cabinet and are provided with a key-operated lock, capable of being reclosed and relocked without a key (see clause 6.5.2.2 of EN 81-1/A2). Yes ☐ No ☐

Confirm that working area in front of the machinery cabinet complies with the requirements according to 6.5.3 of EN 81-1/A2 (see 6.4.2.1 and 6.4.2.2). Yes ☐ No ☐

Confirm that the machinery cabinet is suitably ventilated and protected as far as it is reasonably practicable from dust, harmful fumes and humidity (see clause 6.5.4 of EN 81-1/A2). Yes ☐ No ☐

Confirm that inside the machinery cabinet is permanently installed an electric lighting with an intensity of at least 200 lux at floor level (see clause 6.5.5 of EN 81-1/A2). Yes ☐ No ☐

Confirm that the light is controlled by a switch placed inside the cabinet, close to the door at an appropriate height (see clause 6.5.5 of EN 81-1/A2). Yes ☐ No ☐

Confirm that at least one socket outlet is provided (see clause 6.5.5 of EN 81-1/A2). Yes ☐ No ☐

Confirm that the passage ways are not obstructed by the open door/trap and the protection means are in accordance with national building legislation (0.3.17 of EN 81-1/A2). Yes ☐ No ☐

Emergency operation

Confirm that if the effort required to move the car in the upward direction with its rated load does not exceed 400 N, the machine is provided with a manual means of emergency operation in accordance to clause 12.5.1 of EN 81-1/A2. NA ☐ Yes ☐ No ☐

Confirm that the manual means is designed and monitored according to clause 12.5.1.1 of EN 81-1/A2. NA ☐ Yes ☐ No ☐

Confirm that it is possible to check easily whether the car is an unlocking zone (see clause 12.5.1.2 of EN 81-1/A2). Yes ☐ No ☐

Confirm that if the effort required to move the car in the upward direction with its rated load exceeds 400 N a means of emergency electrical operation is provided in accordance with clause 12.5.2 of EN 81-1/A2.	NA	☐	Yes	☐	No	☐
Confirm that means of emergency electrical operation is in accordance with clause 14.2.1.4 of EN 81-1/A2	NA	☐	Yes	☐	No	☐

Instructions

Confirm that the instruction manual gives the necessary information about the normal use of the lift and rescue operation (see clause 16.3.1 of EN 81-1/A2 and relevant NBL Recommendations).	NA	☐	Yes	☐	No	☐

Appendix B6 : specific checks with respect to EN 81-1 + A3 (applicable to all electric lifts)

FIXING SYSTEMS

Confirm that the fixing systems of safety guards, which have to be removed during regular maintenance and inspection remain attached to the guard or to the equipment when the guard is removed (0.3.19) ---------- NA☐ Yes☐ No☐

SCOPE

Confirm that the lifting speed is > 0,15 m/s, otherwise this checklist is not applicable----- NA☐ Yes☐ No☐ and the appliance shall be assessed to the Machinery directive 2006/42/EC (1.3)

UNINTENDED CAR MOVEMENT

Confirm that a means to prevent unintended car movement with the open / unlocked --- NA☐ Yes☐ No☐ door is applied in conformity with the principles according to 9.11.1

Confirm that the basic characteristics and the references of the type examination certificate of the means to prevent unintended car movement are laid down in the lift book (9.11.13, 16.2) ---------- NA☐ Yes☐ No☐

Confirm that the means to prevent unintended car movement is independent from ------ NA☐ Yes☐ No☐ functional components, unless there is built-in redundancy and self-monitoring (9.11.3)

Confirm that the self monitoring was subject to the type-examination (9.11.3) ---------- NA☐ Yes☐ No☐

Confirm, in case of using the brake that self monitoring consists of either (9.11.3):

- verification of correct lifting or dropping of the mechanism, or ---------- NA☐ Yes☐ No☐
- verification of the braking force ---------- NA☐ Yes☐ No☐

Confirm that self monitoring is functioning correctly and requires manual reset (D.2p)--- NA☐ Yes☐ No☐

Confirm that the stopping element of the means acts either on (9.11.4):

- the car, or ---------- NA☐ Yes☐ No☐
- the counterweight, or ---------- NA☐ Yes☐ No☐
- the rope system (suspension or compensation), or ---------- NA☐ Yes☐ No☐
- the traction sheave or shaft in the direct vicinity of the sheave ---------- NA☐ Yes☐ No☐

Confirm that the means shall stop the car as defined in the type examination certificate (upward empty, downward with 100% rated load) in a distance: (9.11.5, D.2p)

- any direction: maximum 1200 mm from the landing ---------- NA☐ Yes☐ No☐
- downward: distance landing sill to the car door lintel minimum 1000 mm ---------- NA☐ Yes☐ No☐
- upward: distance car sill to the landing door lintel minimum 1000 mm ---------- NA☐ Yes☐ No☐
- upward: distance landing sill to car apron maximum 200 mm ---------- NA☐ Yes☐ No☐

if necessary (depending on the working principle) repeat the test at each landing --------- NA☐ Yes☐ No☐
Remark: Check on retardation of the car is no subject for the final inspection tests)

Confirm that the stopping means operates a safety device, when engaged, which will require manual reset (9.11.8, D.2p, A). Minimum SIL 1 ---------- NA☐ Yes☐ No☐

Confirm that unintended movement is detected at the latest when the car leaves the unlocking zone (9.11.7) ---------- NA☐ Yes☐ No☐

Confirm that the device for detection of unintended car movement is either: (9.11.7)

a safety contact (14.1.2.2), or ---------- NA☐ Yes☐ No☐

a safety circuit (14.1.2.3), or ---------- NA☐ Yes☐ No☐

PESSRAL (14.1.2.6, A). Minimum SIL 2 ---------- NA☐ Yes☐ No☐

Confirm that release of the stopping means does not require access to the car or the counterweight (9.11.10) ---------- NA☐ Yes☐ No☐

Confirm that after release of the means it shall be in a condition to operate (9.11.11) ---- NA☐ Yes☐ No☐

Confirm that absence of energy to operate the means will stop the lift (9.11.12) ---------- NA☐ Yes☐ No☐

STOPPING AND LEVELLING ACCURACY OF THE CAR

Confirm that the stopping accuracy is within 10 mm of the landing sill (12.12, D.2o) ---- NA☐ Yes☐ No☐

Confirm that the levelling accuracy is within 20 mm of the landing sill during loading and unloading conditions at most unfavourable floor (12.12, D.2o) ---------- NA☐ Yes☐ No☐

REMARKS

APPENDIX C EN 81-70 – ACCESSIBILITY TO LIFTS

Within this checklist there are certain requirements relating to audible signals, it is not generally expected that a decibel reading will be necessary to confirm compliance. If however such a reading is necessary then, in accordance with clause 6 Table 3, the reading shall be taken 1m from the source of the sound.

Within this checklist there is reference to the negotiations between the owner and the lift installer, the tester must be aware of all such Negotiations to enable a correct response to these items.

Access to lift car

Confirm by measurement that the door providing access to the lift car is according to the requirements listed in clause 5.2.1 of EN 81-70.(*Type 1- 800mm, type 2-900mm and type 3-1100mm)*			Yes	☐	No	☐
Confirm, that all eligible floors to the lift are clear of any obstacles preventing free access in accordance with clause 5.2.2. (*See Negotiations*)			Yes	☐	No	☐
Confirm that the door dwell time is between 2 to 20 seconds in accordance with clause 5.2.3 EN 81-70			Yes	☐	No	☐
Confirm that the closing door protection is full height between 25mm and 1800mm (see clause 5.2.4 of EN 81-70)			Yes	☐	No	☐
Confirm that any decorative finish on the car walls is less than 15mm (see clause 5.3.11 of EN 81-70).	NA	☐	Yes	☐	No	☐
Confirm that the lift car dimensions are in accordance with clause 5.3.1.1 of EN81-70. *(Type 1- 450 kg : 1000x1250mm; type 2 – 630kg:1100x1400mm; type 3- 1275kg : 2000x1400mm)* (*See Negotiations*)			Yes	☐	No	☐
Confirm that a handrail is fitted to at least one wall of the lift car and has dimensions of x-section 30 x 45mm and top edge 900mm +/- 25mm from car floor. The handrail to be at least 35 mm from car wall (see clause 5.3.2.1 of EN 81-70).			Yes	☐	No	☐
Confirm that (where required by negotiation) a tip up seat is provided 500mm from the lift car floor (+/- 20mm). Depth of seat to be 300-400mm, Width 400-500mm and capable of supporting a load of 100kg.	NA	☐	Yes	☐	No	☐
Confirm that wall mirrors are provided for Type 1 or Type 2 lifts in accordance with clause 5.3.2.3 and are a minimum of 300mm from floor level where car wall are reflective	NA	☐	Yes	☐	No	☐
Confirm that stopping accuracy is +/- 10mm and levelling accuracy within +/- 20mm.			Yes	☐	No	☐

TABLE 2

Confirm that the active part of control buttons are a minimum area of 490mm^2	Yes	☐	No	☐
Confirm that the minimum dimension of the active part of buttons is an inscribed circle of 20mm	Yes	☐	No	☐
Confirm that the active parts of buttons are visually and by touch different from the faceplate and surrounds.	Yes	☐	No	☐
Confirm that the faceplate is a contrast colour to its surrounds	Yes	☐	No	☐
Confirm that the force required to operate a button is between 2,5 to 5N	Yes	☐	No	☐
Confirm that there is an audible feedback to confirm button has been pushed	Yes	☐	No	☐
Confirm that there is visible and audible (adjustable between 35 and 65 db(A)) registration feedback, audible signal on all subsequent operations.	Yes	☐	No	☐
Confirm that exit floor button protrudes greater than 5mm +/- 1mm Note! Preferably green	Yes	☐	No	☐
Confirm that symbols on buttons are on the active part or within 10-15mm to the left of the button	Yes	☐	No	☐
Confirm that symbols are in relief by a minimum of 0.8mm, contrasted to the background and 15-40mm high	Yes	☐	No	☐
Confirm that active parts of buttons are a minimum of 10mm apart.	Yes	☐	No	☐
Confirm that the instruction manual gives the necessary information about the normal use of the lift and rescue operation (see clause 16.3.1 of EN 81-1/A2).	Yes	☐	No	☐
Confirm that distance between groups of buttons(e.g. between alarm/door buttons and call buttons are a minimum of 2 x the distance between the active parts of buttons) (not applicable to landing buttons)	Yes	☐	No	☐
Confirm that minimum height from floor to centreline of any button is 900mm	Yes	☐	No	☐
Confirm that maximum height to centreline of highest button is : Landing-1100mm and car- 1200mm (preferably 1100)	Yes	☐	No	☐
Confirm that the arrangement of landing buttons is vertical	Yes	☐	No	☐
Confirm that the arrangement of car buttons is: Centreline of alarm and car door buttons with a centreline minimum 900mm above floor level- call buttons placed above the alarm and door buttons and for single horizontal row from left to right – for single vertical row from bottom to top and for multiple vertical rows from left to right and then from bottom to top.	Yes	☐	No	☐
Confirm that centreline of any landing buttons is > 500mm from any corner of adjacent walls. *(reveal limited to 250 mm depth, see also CEN Interpretation)*	Yes	☐	No	☐

Confirm that centreline of any car buttons is > 400mm from any corner of adjacent walls			Yes	☐	No	☐
KEYPADS (ANNEX F)	NA	☐	Yes	☐	No	☐
Confirm that distance between buttons is 10 to 15mm or 5 to 15mm for inclined pads			Yes	☐	No	☐
Confirm that buttons have perceivable movement or audible feedback between 35 and 65 dB(A) and visible signal to indicate registration. Audible signal to be repeated each time button is pressed/			Yes	☐	No	☐
Confirm that floor numbers on buttons are between 15 and 40 mm and are contrasted to the background			Yes	☐	No	☐
Confirm that the number 5 has a single tactile dot			Yes	☐	No	☐
Confirm that numbers and symbols are on active part of the button			Yes	☐	No	☐
Confirm that keypads in the car have buttons clearly distinguished from other buttons in the car and the exit floor button is green and protrudes 5 mm +/- 1 mm above other buttons. (It may be marked with a relief star)			Yes	☐	No	☐
CONTROL DEVICES AND SIGNALS						
Landing Control Devices						
Confirm that where temporary activation control is provided, the activation device is marked with the international symbol for provision for the disabled (number 0100 from ISO 7000:1989) (see negotiation)	NA	☐	Yes	☐	No	☐
Confirm that control device is adjacent to landing doors for single lift; one per face for groups where lifts are opposite to each other and one between two lifts for maximum of 4 adjacent lifts	NA	☐	Yes	☐	No	☐
Car Control Devices						
Confirm that buttons are identified -2, -1, 0, 1, 2….etc for floors Alarm button is yellow with bell shape Door re-open by <|> Door close by >|< (clause 5.4.1)			Yes	☐	No	☐
Confirm that the car controls are located: On Right Hand Side when entering for centre opening doors On closing side when entering for side opening doors For type 3 lifts with two entrances either of above options. .			Yes	☐	No	☐
Confirm that in the case of lifts with Destination Control System, if the user has selected “temporary activation” when provided, the door closing is initiated by the door close button; if the car is not used it returns to normal operation after 30 s to 60 s.	NA	☐	Yes	☐	No	☐
Landing Signals						
Confirm that for push button systems an audible signal is made when doors start opening (if door operation exceeds 45 dB(A) this may be unnecessary).	NA	☐	Yes	☐	No	☐
Confirm for collective control that illuminated indicator arrows, at least 40	NA	☐	Yes	☐	No	☐

mm high, positioned above or near doors 1.8 to 2.5 m from floor level indicate direction of travel. Indicators have an angle of view of 140^0.
An audible signal with the arrows one sound for up and two for down, sounds for up and down are different .
(for a single lift if similar signals in the car are visible and audible from landing then no landing devices are necessary)

Destination Control System (where fitted) NA ☐

Confirm that :
a) Confirmation of selected floor is by audible and visible signal. Visible signal is near the input device
b) 40 mm high letters contrasted to their surround above each landing door identify each lift.
c) Lift allocation by visible and audible signal visual signal is near input device
d) Visible and audible signals identify the lift.
e) Users are informed visually and audibly they are entering the allocated car.

Yes ☐ No ☐

Confirm that audible signals are adjustable between 35 and 63 dB(A)

Yes ☐ No ☐

Car Signals

Confirm that there is a position signal in the car operating panel or above it at a height between 1.6 and 1.8m above floor level. Floor numbers are between 30 and 60 mm. A second indicator may be provided, if this is at high level then the one in or above the car panel may be at less than 1.6 m

Yes ☐ No ☐

Confirm that when the car stops at floor level a voice announces the floor in one of the official local languages. Sound level adjustable between 35 and 65dB(A).

Yes ☐ No ☐

Confirm that there is an emergency alarm device meeting requirements of EN81: Part 28 plus
a) Visible and audible signals
b) Yellow illuminated pictogram to indicate alarm given
c) Green illuminated pictogram to indicate alarm has registered
d) Devices such as induction loop for impaired hearing if required.
e) voice link sound level adjustable between 35 and 65 dB(A)

Yes ☐ No ☐

APPENDIX D EN81-72 – FIREFIGHTING LIFTS

Within the harmonized Standard there are certain requirements relating to the building into which the Fire fighting Lift is installed. It is not generally expected that the person conducting the test will test or examine the following but he may require confirmation that they have been considered by the persons responsible for the construction.

1.2 This Standard is not applicable to dual entry lifts where the fire fighters lobbies are not located at the same side as that of the fire service access level.
0.1 The fire protected lobby and lift well are designed to restrict the ingress of smoke.
0.2 The building design limits the flow of water into the lift well
0.3 Fire fighters lifts are not escape routes
0.4 A Fire fighters lift accesses at each level to a fire protected lobby
0.5 The EN81 – 72 does not prescribe requirements for the fire resisting structure of the building.

FUNDAMENTAL REQUIREMENTS						
Confirm lift serves every floor in the building (clause 5.2.2)			Yes	☐	No	☐
Confirm, car dimensions are according to ISO4190-1 but not < 1100 x 1400mm			Yes	☐	No	☐
Confirm rated load is ≥ 630kg			Yes	☐	No	☐
Confirm entrance width ≥ 800 mm			Yes	☐	No	☐
Confirm when dual entry car and/or used for evacuation car dimensions at least 1100 x 2100mm.	Width mm		Depth mm			
Confirm when dual entry car and/or used for evacuation rated load ≥ 1000kg	NA	☐	Yes	☐	No	☐
Confirm that time to reach furthest floor from access level is ≥ 60 s			Yes	☐	No	☐

FIRE COMPARTMENTS						
LIFTWELL						
Confirm all electrical equipment within 1 m of wall containing landing doors is protected against dripping and splashing water.			Yes	☐	No	☐
Confirm all electrical equipment < 1.0m above pit floor is protected to IP67	NA	☐	Yes	☐	No	☐
Confirm Socket outlet and lowest lamp in pit is ⩾ 0.5m above highest permissible water level			Yes	☐	No	☐
Confirm equipment in machinery spaces located outside of well are protected from malfunction caused by water	NA	☐	Yes	☐	No	☐
Confirm means exist to ensure that highest water level in pit is ≤ fully compressed car buffer			Yes	☐	No	☐
Confirm means exist to prevent water level in pit reaching equipment which would create a malfunction of the lift.	NA	☐	Yes	☐	No	☐

RESCUE OF TRAPPED FIRE FIGHTERS IN THE LIFT CAR						
Confirm that an emergency trapdoor in car roof is provided with dimensions ⩾ 0.5m x 0.7m (0.4m x 0.5m if rated load 630kg)			Yes	☐	No	☐
Confirm no tools are required to remove any suspended ceiling to give access to the lift car from the car roof.	NA	☐	Yes	☐	No	☐
RESCUE OF TRAPPED FIRE FIGHTERS FROM OUTSIDE THE CAR (responsibility of local authorities)						
Confirm Fixed ladders are positioned within 0.75m of landing sill. (Ladders to conform to EN 81: Parts 1-2) - Clause 5.4.3 of EN81: Part 72 describes other means of rescue.	NA	☐	Yes	☐	No	☐
SELF RESCUE FORM INSIDE THE LIFT CAR						
Confirm that maximum step rise to reach trap door is 0.4m and distance from stepping point to a vertical wall is ⩾ 0.1m			Yes	☐	No	☐
Confirm that each step point appears capable of of supporting a load of 1200N			Yes	☐	No	☐
Confirm that the ladder and trap door dimensions and position is such that a firefighter can pass through.			Yes	☐	No	☐
Confirm that a diagram or symbol at each landing indicates how the landing door may be unlocked.			Yes	☐	No	☐
LADDER USED TO GAIN ACCESS TO LANDING DOOR FROM CAR ROOF						
Confirm that ladder is fixed to car, that it does not introduce tripping hazard when stored , that a safety switch monitors removal of ladder preventing movement of the lift car and ladder is of sufficient length to reach landing above when car is level with a landing.			Yes	☐	No	☐

LOBBY						
Confirm that each landing entrance has a fire protected lobby			Yes	☐	No	☐
Confirm that electrical equipment in the lobby can continue to function for 2 hours at a temperature range of 0 to 65^0 C and equipment not in the lobby can operate at a temperature range between 0 and 40^0 C			Yes	☐	No	☐
Confirm that lift control will function correctly in smoke filled lift well and machine rooms for a minimum of 2 hours.			Yes	☐	No	☐
Confirm that where a dual entry lift car is used any landing entrance not intended for fire fighters use shall not exceed 65^0 C	NA	☐	Yes	☐	No	☐
Confirm that the source of the secondary power supply is located in a fire protected area.			Yes	☐	No	☐
Confirm that the primary and secondary power supplies are separated from each other and other power supplies.			Yes	☐	No	☐
CAR AND LANDING DOORS						
Confirm that horizontal car and landing doors are automatic and coupled			Yes	☐	No	☐
LIFT MACHINE AND ASSOCIATED EQUIPMENT						
Confirm that any compartment containing lift equipment has equivalent protection to the lift well			Yes	☐	No	☐
Confirm that any connection of cables, hydraulic pipes between fire compartments shall have equivalent protection to the fire compartments			Yes	☐	No	☐
CONTROL SYSTEM						
Confirm that the fire fighters lift switch is within 2m of the landing entrance, between 1.8m and 2.1m above landing level and is identified by suitable pictogram.			Yes	☐	No	☐
Confirm that operation of the switch is by emergency unlocking triangle and switch position marked I for fire fighters service and O for normal operation.			Yes	☐	No	☐
Confirm that external fire control input only allows fire fighters lift to return to fire service access level and stay with doors open full fire fighters service requires operation of the fire fighters lift switch.			Yes	☐	No	☐
Confirm that fire fighters lift switch does not override inspection control, emergency stop switches or emergency electrical operation.	NA	☐	Yes	☐	No	☐
Confirm that all lift safety devices remain operational with exception of door reversal devices when fire fighters switch is operated.			Yes	☐	No	☐
Confirm that malfunction of any electrical control system outside the lift well does not cause malfunction of the fire fighters lift. (This includes faults in common group control systems between lifts)			Yes	☐	No	☐
Confirm that an audible alarm sounds if door dwell time exceeds 2 minutes after which time the doors will close at reduced power.			Yes	☐	No	☐

PHASE 1: PRIORITY RECALL operate fire fighters switch and confirm the following.						
All landing and car call buttons inoperative and existing calls cancelled			Yes	☐	No	☐
Door open and emergency alarm button to remain operative			Yes	☐	No	☐
Door reversal devices, which may be affected by heat or smoke, to be inoperative.			Yes	☐	No	☐
Lift functions independently of all other lifts in a group.			Yes	☐	No	☐
Lift remains at fire service access level with doors open.			Yes	☐	No	☐
Communication device described in clause 5.12 remains operational			Yes	☐	No	☐
If lift is on inspection control an audible signal sounds until inspection control is returned to Normal.			Yes	☐	No	☐
If Fire fighters lift is travelling away from the fire service access level it shall stop at nearest possible floor, doors remain closed then returns to fire service access floor.			Yes	☐	No	☐
Well and Machine room lighting to be automatically illuminated when fire fighters service initiated.			Yes	☐	No	☐
PHASE 2: USE OF THE LIFT UNDER FIRE FIGHTERS CONTROL						
Car Control Devices to confirm the following:						
Where PHASE 1 has been initiated by an external signal the lift will not operate until fire fighters lift switch has been operated.			Yes	☐	No	☐
Only one car call may be selected simultaneously			Yes	☐	No	☐
.						
It is possible to register another call in the car whilst lift is in motion, this cancels previous call and car travels to new registered floor as quickly as possible.			Yes	☐	No	☐
Registration of car call causes lift to travel to selected floor and remain there with doors closed						
When car is stationary at a landing pressure on the door open button to cause doors to open, release of pressure causes doors to reclose. When fully open doors remain open until next call selected.			Yes	☐	No	☐
Car door reversal devices and door open buttons to remain operative except those which may be affected by heat or smoke			Yes	☐	No	☐

If fire fighters lift service switch is operated from I to O for 5 seconds then returned to I the lift shall return to the fire access level.			Yes	☐	No	☐
If a fire fighters car key switch is fitted then it is marked I and O and key is removable in O position only. If fire service access level switch is set for firefighting mode then the car key switch must be set to I to allow car movement. If the car key switch is set at O position movement of the car is prevented and doors will remain open if lift is not at fire service access level.	NA	☐	Yes	☐	No	☐
Registered car call displayed visually on car control panel			Yes	☐	No	☐
Position of the car to be visually diplayed at fire service access level and in car under both normal and emergency power supply conditions			Yes	☐	No	☐
Lift will not move until call is registered in car			Yes	☐	No	☐
Fire service communication remains operative during PHASE 2			Yes	☐	No	☐
Lift returns to fire service access level when fire fighters switches are returned to normal position before going into normal service.			Yes	☐	No	☐
DUAL ENTRY LIFT CAR	NA	☐				
When the protected fire lobbies are all the same side as the Fire Service access level then confirm the following:						
Two control panels provided at front and rear of lift car one for Normal use and one fire fighters control at the side of the fire protected lobbies marked with a pictogram.			Yes	☐	No	☐
Confirm Normal car control panel inoperative when PHASE I selected except for door open and alarm buttons.			Yes	☐	No	☐
Confirm fire fighters control panel operative from start of PHASE 2.			Yes	☐	No	☐
Confirm landing doors not intended for fire fighters use remain closed			Yes	☐	No	☐
Confirm landing doors to fire protected lobbies are brought into operation			Yes	☐	No	☐
POWER SUPPLIES						
Confirm primary and secondary supplies fire protected to same level as lift well equipment.			Yes	☐	No	☐
Confirm secondary supplies adequate to run lift at rated speed and reach furthest floor from fire service access level within 60 seconds			Yes	☐	No	☐
Confirm that lift will not perform a correction run whilst on PHASE 2 and the power supply is re-established after a power failure.			Yes	☐	No	☐

Confirm that when the power supply is re-established the lift is available for service, if the lift needs to move to establish its position it moves no more than two floors towards the fire service access level.			Yes	☐	No	☐
CAR AND LANDING CONTROLS						
Confirm that whist on PHASE 2 control, operation of the fire fighters lift is by a full set of push buttons in the lift car. Controls and indicators to be protected to at least IPX3.			Yes	☐	No	☐
Confirm that the car button for the fire service access level is suitably marked with a pictogram (Annex F) located either on or adjacent to the button			Yes	☐	No	☐
FIRE SERVICE COMMUNICATION SYSTEM						
Confirm the fire fighters lift has an intercom system or similar device for interactive 2 way speech communication whilst the lift is in PHASES 1 and 2 between the fire fighters lift car and; a) the fire service access level and b) the fire fighters machine room, or in the case of machine room less lifts at the landing mounted control panel. Where a machine room is provided the microphone must only be active when a control button is pressed on its unit			Yes	☐	No	☐
Confirm that the communication system within the car and at the fire service access level is hands free and not a telephone handset.			Yes	☐	No	☐
Confirm the wiring for the communication system is within the lift well.			Yes	☐	No	☐
INSTRUCTIONS						
Confirm that the instruction manual gives the necessary information about the fire fighting lift (see clause 7 EN81:72: 2003)			Yes	☐	No	☐

APPENDIX E – EN 81-21:2009

This check-list specifies the tests and verification to be carried out on new passenger or good/passenger lifts, permanently installed in existing buildings, where in some circumstances due to limitation enforced by building constraints, some requirements of EN 81-1 cannot be met.

According to section 2.2 of Annex I to the Lifts Directive, the application of alternative measures to prevent the risk of crushing above or underneath the lift car is restricted to installations where the requirement for free space or refuge is impossible to fulfil and may be subject to prior approval by national authorities.

2.0 Machine and Pulley Spaces

The following verification shall be carried out both in the machinery room and in the pulley spaces.

2.3 Dimensions

Confirm that, in case the height of the machine room is less than 2,0, an adequate warning is appropriately placed and soft material is provided under the ceiling above those areas (5.9 of EN 81-21)			Yes	☐	No ☐
Confirm the height of the machine room is not less 1,80m in working areas (5.9 of EN 81-21)			Yes	☐	No ☐

2.4 Access

Confirm that the access doors has a minimum width of 0,80m and a minimum height of 1,70m (5.10 of EN 81-21)			Yes	☐	No ☐
Confirm, in case the height of the door is less than 1,80, a suitable warning is placed on both side of the door (5.10 of EN 81-21)			Yes	☐	No ☐

2.10 Doors/Trap Doors

Confirm that the access trap doors for persons have a clear passage of at least 0,60m x 080m (5.11 of EN 81-21)			Yes	☐	No ☐
Confirm, in case one of the dimension is less than 0,80 m, a suitable warning is placed on both side of the door (5.11 of EN 81-21)			Yes	☐	No ☐

3.0 The Well

3.1 a) Reduced top clearance			Yes	☐	No ☐
The lift is equipped with movable stops, or	N/A	☐	Yes	☐	No ☐
The lift is equipped with a pre-triggered stopping system	N/A	☐	Yes	☐	No ☐

3.1 b) Operation

The lift is equipped with automatically operated movable stops/triggering devices, or	N/A	☐	Yes	☐	
The lift is equipped with manually operated movable stops/ triggering devices	N/A	☐	Yes	☐	
Confirm that the automatically operated movable stops/triggering devices operate in case of power failure (5.5.2.4.1 of EN 81-21)	N/A	☐	Yes	☐	No ☐
Confirm that, in case of power failure, and manually operated movable stops/triggering devices, a mechanical safety device maintains the car stationary (5.5.2.4.1 of EN 81-21)	N/A	☐	Yes	☐	No ☐
Confirm that, in traction drive lifts, the mechanical safety device is operated by the safety system designed according to 5.5.3 of EN 81-21 (5.5.2.4.2 of EN 81-21)	N/A	☐	Yes	☐	No ☐
Confirm that a signal visible and/or audible informs about the position of the movable stops/triggering devices (5.5.4 of EN 81-21)			Yes	☐	No ☐

3.1 c) Movable stops

Confirm that in traction drive lifts the movable stops are installed under the counterweight (5.5.2.1.1.1 of EN 81-21)	N/A	☐	Yes	☐	No ☐

Confirm that in positive drive lifts the movable stops are installed above the car — N/A ☐ Yes ☐ No ☐

3.0 The Well (continued)

Confirm that the movable stops are equipped with buffers complying with EN 81-1:1998 10.3 and 10.4 (5.5.2.1.2.1 of EN 81-21) — N/A ☐ Yes ☐ No ☐

3.1 d) Pre-triggered stopping system

Confirm that the pre-triggered stopping system operates properly (5.5.2.2 of EN 81-21) — N/A ☐ Yes ☐ No ☐

Confirm that the pre-triggered stopping system is type tested in compliance with EN 81-21 Annex C (5.5.2.2 of EN 81-21) — N/A ☐ Yes ☐ No ☐

3.1 e) Top clearance

Confirm that, when the buffering parts of the movable stops are fully compressed or when the car is stopped by the pre-triggered stopping system, the following condition are satisfied at the same time (5.5.2.3 of EN 81-21) :

(ii) The dimension from the standing area on the car roof to the lowest part of the ceiling of the well above this area is at least (1.2 m + 0,035V^2; — Yes ☐ No ☐

(iii) The free vertical distance between the lowest part of the ceiling of the well and the highest item of equipment on the car roof (excluding (iv) below) is at least 0.3 m + 0,035V^2 — Yes ☐ No ☐

(iv) The free vertical distance between the lowest part of the ceiling of the well and the highest part of the guide shoes/rollers, rope attachments/header or parts of vertically sliding doors should be at least 0.1 m + 0,035V^2 — Yes ☐ No ☐

The free vertical distance between the lowest part of the ceiling of the well and the highest parts of the balustrade or extended balustrade item of equipment is at least 0.3 m + 0,035V^2 — Yes ☐ No ☐

Note : The value 0,035V^2 shall only be taken into account for traction lifts with movable stops

3.1 f) car roof balustrade

Confirm that the lift is equipped with an extendable balustrade complying with EN 81-21:2009 – clause 5.6.2 a) b) c) — Yes ☐ No ☐

Confirm that the position of the balustrade is monitored by an electric safety switch (5.6.2 d) of EN 81-21) — Yes ☐ No ☐

Confirm that, in case of emergency electrical operation, the upward travel of the car is limited by a direction dependant switch complying with EN 81-1:1998 clause 14.1.2 (5.6.2 e) of EN 81-21) — N/A ☐ Yes ☐ No ☐

Confirm that the warning required in 7.2.2 of EN 81-21 is provided — Yes ☐ No ☐

3.0 The Well (continued)

3.1 g) Reduced bottom clearances			Yes	☐	No	☐
The lift is equipped with movable stops, or	N/A	☐	Yes	☐	No	☐
The lift is equipped with a pre-triggered stopping system	N/A	☐	Yes	☐	No	☐
3.1 h) Operation						
The lift is equipped with automatically operated movable stops/triggering devices, or	N/A	☐	Yes	☐		
The lift is equipped with manually operated movable stops/ triggering devices	N/A	☐	Yes	☐		
Confirm that the automatically operated movable stops/triggering devices operate in case of power failure (5.5.2.4.1 of EN 81-21)	N/A	☐	Yes	☐	No	☐
Confirm that, in case of power failure, and manually operated movable stops/triggering devices, a mechanical safety device maintains the car stationary (5.5.2.4.1 of EN 81-21)	N/A	☐	Yes	☐	No	☐
Confirm that, in case of manually operated movable stops/triggering devices,, the mechanical safety device is operated by the safety system designed according to 5.5.3 of EN 81-21 (5.5.2.4.2 of EN 81-21)	N/A	☐	Yes	☐	No	☐
Confirm that a signal visible and/or audible informs about the position of the movable stops/triggering devices (5.5.4 of EN 81-21)			Yes	☐	No	☐
3.1 i) Movable stops						
Confirm that the movable stops are installed in the pit to mechanically stop the car (5.7.2.1 of EN 81-21)	N/A	☐	Yes	☐	No	☐
Confirm that the movable stops are equipped with buffers complying with EN 81-1:1998 10.3 and 10.4 (5.5.2.1.2.1 of EN 81-21)	N/A	☐	Yes	☐	No	☐

3.0 The Well (continued)

3.1 l) Pre-triggered stopping system

Confirm that the pre-triggered stopping system operates properly (5.7.2.2 of EN 81-21)	N/A	☐	Yes	☐	No	☐
Confirm that the pre-triggered stopping system is type tested in compliance with EN 81-21 Annex C (5.7.2.2 of EN 81-21)	N/A	☐	Yes	☐	No	☐

3.1 m) Bottom clearance

Confirm that, when the car rests on the fully compressed buffers of the movable stops or buffering when the car is stopped by the pre-triggered stopping system, the following condition are satisfied at the same time (5.7.2.3 of EN 81-21) :

(i) Sufficient space below the car to accommodate a rectangular block 0.5m x 0.6m x 1.0m resting on one of its faces.	Yes	☐	No	☐
(ii) A free vertical distance between the bottom of the pit and the lowest part of the car (excluding the area in (iii) below) of at least 0.5m	Yes	☐	No	☐
(iv) A free vertical distance between highest parts in the pit and the lowest part of the car of at least 0.3m.	Yes	☐	No	☐

3.1 n) Apron

Confirm that each car sill is equipped with an apron retracted under normal operation and manually extendable when needed complying 5.8.2 a) of EN 81-21	N/A	☐	Yes	☐	No	☐
Confirm that each car sill is equipped with an apron retracted under normal operation and automatically extended on opening any landing door with the emergency unlocking key complying 5.8.2 b) of EN 81-21	N/A	☐	Yes	☐	No	☐
Confirm that each car sill is equipped with an apron extended under normal operation and retracted when the car is reaching the lower position complying 5.8.2 c) of EN 81-21	N/A	☐	Yes	☐	No	☐
Confirm that, in case of extendable car apron, the warning required in 7.2.4 of EN 81-21 is provided	N/A	☐	Yes	☐	No	☐

3.0 The Well (continued)

3.4 Protection in the well

Confirm that in case of existing perforate well enclosure the openings complies with EN ISO 13857, clause 4.2.4.2, and	N/A	☐	Yes	☐	No	☐
The landing door locking device are protected against manipulation in compliance with 5.1 b) of EN 81-21	N/A	☐	Yes	☐	No	☐
Confirm that the distance between the car and the counterweight or balancing weight is at list 25 mm, and	N/A	☐	Yes	☐	No	☐
In this case, the lift is provided with emergency guidance on the car and counterweight	N/A	☐	Yes	☐	No	☐
Confirm that, in case of a separate well for the counterweight /balancing weight, the requirements in 5.3.1 and 5.3.2 of EN 81-21 are satisfied	N/A	☐	Yes	☐	No	☐
Confirm that, in case of diverter pulleys installed in the headroom of the well within the projection of the car, the requirements in 5.4 of EN 81-21 are satisfied	N/A	☐	Yes	☐	No	☐
Confirm that, in case of reduced top clearance, the warning required in 7.2.1 of EN 81-21 is provided	N/A	☐	Yes	☐	No	☐
Confirm that, in case of reduced pit clearance, the warning required in 7.2.3 of EN 81-21 is provided	N/A	☐	Yes	☐	No	☐

6.0 Controls

Safety System

Confirm that the an electrical safety device is able to (5.5.3.1 and/or 5.7.3.1 of EN 81-21) :	Yes ☐	No ☐
a) Activate a safety system that neutralises normal operation	Yes ☐	No ☐
b) Operate when any door/trap door giving access to car roof (or to the pit) is opened by means of a key	Yes ☐	No ☐
c) Be bi-stable switch	Yes ☐	No ☐
d) Be reset together with the resetting of the safety system	Yes ☐	No ☐
Confirm that the resetting of the safety system and the return of the lift to normal operation is only possible by operation of an electrical reset device (5.5.3.2 and/or 5.7.3.2 of EN 81-21)	Yes ☐	No ☐
Confirm that the resetting is possible only when (5.5.3.2.1 and/or 5.7.3.2.1 of EN 81-21) :	Yes ☐	No ☐
a) the lift is not in inspection operation;	Yes ☐	No ☐
b) the stopping device in the pit and on car roof are not in STOP position	Yes ☐	No ☐
c) any door/trap door giving access to the car roof (or to the pit) is closed and locked	Yes ☐	No ☐
d) the devices providing the safety spaces are in inactive position	Yes ☐	No ☐
Confirm that a power failure do not reset the safety system (5.5.3.2.2 and/or 5.7.3.2.2 of EN 81-21)	Yes ☐	No ☐
Confirm that the electrical reset devise is (5.5.3.3 and/or 5.7.3.3 of EN 81-21) :	Yes ☐	No ☐
a) Lockable	Yes ☐	No ☐
b) Placed outside the well and accessible to authorised persons only	Yes ☐	No ☐
c) Monitored by an electrical safety device	Yes ☐	No ☐
Conform that an additional final limit switch is installed in compliance with 5.5.3.4 and/or 5.7.3.4 of EN 81-21	Yes ☐	No ☐
Confirm that normal operation of the lift is only possible if the movable stops or the triggering device are in the inactive position (5.5.3.5 and/or 5.7.3.5 of EN 81-21)	Yes ☐	No ☐

Confirm that if the safety system has been activated , inspection operation is possible only if the movable stops or the triggering device are in the active position (5.5.3.6 and/or 5.7.3.6 of EN 81-21)			Yes	☐	No ☐
Confirm that when the safety system has been activated and the movable stops or the triggering device are not In the active position, electrical emergency operation is possible only in down direction (in up direction) (5.5.3.7 and/or 5.7.3.7 of EN 81-21)	N/A	☐	Yes	☐	No ☐

7.0 Car & Counterweight Safety Gear & Overspeed Protection

Tests before to put the lift into service

Confirm that, in case of reduced top clearance, no deterioration that could affect the normal use has occurred after have carried out the tests required in 6.2 a) of EN 81-21.	N/A	☐	Yes	☐	No ☐
Confirm that, in case of reduced pit clearance, no deterioration that could affect the normal use has occurred after have carried out the tests required in 6.2 b) of EN 81-21.	N/A	☐	Yes	☐	No ☐

11.0 Documentation

Confirm that, in case of reduced safety space, prior approval by national authorities (according to local regulation) is available			Yes	☐	No ☐
Confirm that instruction manual includes explanation of the functioning, use and maintenance complying with 7.1 of EN 81-21.			Yes	☐	No ☐
Confirm that, in case of pre-triggered system, the information required in 7.1 of EN 81-21 are included in the instruction manual	N/A	☐	Yes	☐	No ☐

Annex A – Additional Requirements For Unit Verification

The following describes additional tests and verification necessary when validating lift installations in accordance with Annex X of the Lifts Directive 95/16/EC.

A.1 – Documentation and Design

Confirm that technical dossier includes information about protective measures taken			Yes	☐	No ☐
Confirm that, in case of pre-triggered system, the test report required in C.5 of EN 81-21, or an equivalent type test certificate is included in the technical dossier	N/A	☐	Yes	☐	No ☐

APPENDIX F - Behaviour of lifts in the event of fire

Where lifts are provided with recall systems they shall comply to EN 81-73:2005 in addition to the requirements of EN 81-1:1998. Additional examinations and tests shall be carried out and recorded using the questionnaire given in Tables **E.**1 to **E.**3.

Table E.1 – Result of examination and test for hydraulic lifts – Lifts with recall systems – General characteristics

E.1.1 Input signals		
a) Is there an electrical recall signal provided by either a fire alarm system or a manual recall device?		**Yes** ☐
b) If the recall device is manual, is it:	**N/A** ☐	**Yes** ☐
1) bi-stable in operation? [see EN 81-73:2005, **5.1.1a**)]	**N/A** ☐	**Yes** ☐
2) clearly marked for position and purpose? [see EN 81-73:2005, **5.1.1b)** and **c)**]	**N/A** ☐	**Yes** ☐
3) located at the main designated floor or in the building management centre? [see EN 81-73:2005, **5.1.1d**)]	**N/A** ☐	**Yes** ☐
4) protected from misuse when accessible to all? [see EN 81-73:2005, **5.1.1e**)]	**N/A** ☐	**Yes** ☐
E.1.2 Stopped position		
Confirm that when stopped due to fault conditions, on inspection control or under emergency electrical control the recall signal does not cause the lift to move. (see EN 81-73:2005, **5.1.2**)		**Yes** ☐
E.1.3 Prohibition sign		
Confirm that a sign conforming to ISO 3864-1, warning against using the lift in the event of fire, has been provided at all landings. (see EN 81-73:2005, **5.1.3**)		**Yes** ☐

Table E.2 – Result of examination and test for hydraulic lifts – Lifts with recall systems – Behaviour

E.2.0 Behaviour

a) When a recall signal is received, confirm that the lift reacts as follows.

1) All landing and car controls including the door re-open button become inoperative. [see EN 81-73:2005, **5.3.1a**)] **Yes** ☐

2) All existing registered calls are cancelled. [see EN 81-73:2005, **5.3.1b**)] **Yes** ☐

3) If the lift has power-operated doors and is parked at a landing, the doors are closed and the lift returns to the designated floor. [see EN 81-73:2005, **5.3.1c**)1)] **N/A** ☐ **Yes** ☐

4) If the lift has manually operated doors and is parked at a landing with the doors open, it remains at the floor until the doors are closed and then returns to the designated floor. [see EN 81-73:2005, **5.3.1c**)2)] **N/A** ☐ **Yes** ☐

5) If the lift is travelling away from the designated floor, it makes a normal stop and then returns without opening the doors until arrival at the designated floor. [see EN 81-73:2005, **5.3.1c**)3)] **Yes** ☐

6) If the lift is travelling towards the designated floor, it continues without stopping until its arrival at the designated floor. [see EN 81-73:2005, **5.3.1c**)4)] **Yes** ☐

7) The lift remains stationary if any safety device has been operated. [see EN 81-73:2005, **5.3.1c**)5)] **Yes** ☐

E.2.0 Behaviour *(continued)*

b) Confirm that any door reversal devices that could be effected by smoke or heat are made inoperative by the recall signal. (see EN 81-73:2005, **5.3.2**) **N/A** ☐ **Yes** ☐

c) Confirm that the automatic dispatch of the lift to the lowest landing level as required by EN 81-2:1998, 14.2.1.5b) has been rendered inoperative (see EN 81-73:2005, **5.3.3**) **Yes** ☐

d) Confirm that a fault on a lift which is part of a group does not prevent recall of the other lifts in the group. (see EN 81-73:2005, **5.3.4**) **N/A** ☐ **Yes** ☐

e) Confirm that on arrival at the designated floor, lifts with power-operated doors park with the doors open and are removed from service. (see EN 81-73:2005, **5.3.5**) **N/A** ☐ **Yes** ☐

f) Confirm that on arrival at the designated floor, lifts with manually operated doors park with the doors unlocked and are removed from service. (see EN 81-73:2005, **5.3.6**) **N/A** ☐ **Yes** ☐

Table E.2 – Result of examination and test for hydraulic lifts – Lifts with recall systems – Behaviour

g)	Confirm that the lift returns to normal service either by an automatic signal from the fire alarm system or the reset of the manual recall device. (see EN 81-73:2005, **5.3.7**)		**Yes**	☐
h)	Confirm that a "No Entry" sign in accordance with EN 81-73:2005, **5.3.8** is displayed at the designated floor whist the lift is out of service. *NOTE The sign should have a diameter not less than 25 mm if it is in the landing controls, otherwise it should have a diameter not less than 50 mm.*		**Yes**	☐
i)	Where multiple designated floors are required, confirm that an additional electrical signal will recall the lift to an alternative floor.	**N/A** ☐	**Yes**	☐

Table E.3 – Result of examination and test for hydraulic lifts – Lifts with recall systems – Documentation

Confirm that documentation has been provided in the user manual relative to the recall controls and the need for regular tests to be carried out.	**Yes**	☐

APPENDIX G – Lift according to EN 81-71 (Vandalism)

Where lifts are provided with features to combat vandalism they shall comply to EN 81-71:2005 in addition to the requirements of EN 81-1:1998. Additional examinations and tests shall be carried out and recorded using the questionnaire given in Tables D.1 to D.9.

NOTE 1 The tester needs to be aware of all negotiations between the owner and the lift installer, in order to enable a correct response to these items. For example this is particularly important in respect of the choice between category 1 and category 2 installations.

For tests relating to audible signals the reading shall be taken one metre from the source of the sound.

NOTE 2 It is not generally expected that a decibel reading will be necessary to confirm compliance or if required it is to verify that adjustable devices have been correctly set.

Table G.1– Result of examination and test for lifts – Lifts with features to combat vandalism – Lift well

G.1.1 Well enclosure				
a) Confirm that the well enclosure is imperforate and meets the requirements for materials and strength given in EN 81-71:2005, **5.1.1.1**.			**Yes**	
b) Confirm that partial well enclosures for category 1 lifts are a minimum of 5 m high in accordance with EN 81-71:2005, **5.1.1.2**.	**N/A**		**Yes**	
c) Confirm that category 2 lifts are installed in a totally enclosed well in accordance with EN 81-72:2005, **5.1.1.3**.	**N/A**		**Yes**	
G.1.2 Inspection and emergency doors and inspection traps				
a) Confirm that inspection and emergency doors and inspection traps cannot be opened with any of the items listed in EN 81-71:2005, Table E.1.	**N/A**		**Yes**	
b) Confirm that such doors are of sufficient strength as required by EN 81-71:2005, **5.1.2.2**.			**Yes**	
D.1.3 Well ventilation				
Confirm that ventilation openings are in accordance with EN 81-71:2005, **5.2.3** and **5.2.4** (i.e. smaller than 250 mm × 250 mm, protected from objects passing through and of similar strength to the well enclosure).	**N/A**		**Yes**	

Table D.2 – Result of examination and test for lifts – Machinery spaces, pulley spaces and machinery cabinets

a) Confirm that materials used in the construction of any machinery space, pulley space or cabinet outside of the well are in accordance with EN 81-71:2005, **5.1.1.1**.			**Yes**	☐
b) Confirm that where windows have been provided and are accessible to persons, their strength is in accordance with EN 81-71:2005, **5.1.1.1**.	**N/A**	☐	**Yes**	☐
c) Confirm that ventilation openings are in accordance with EN 81-71:2005, **5.2.3** and **5.2.4** (i.e. smaller than 250 mm × 250 mm, protected from objects passing through and of similar strength to the well enclosure).			**Yes**	☐
d) Confirm that doors and trapdoors with their locks meet the strength requirements of EN 81-71:2005, **5.1.2.2**.	**N/A**	☐	**Yes**	☐
e) For category 2 lifts, confirm that an intruder alarm:	**N/A**	☐	**Yes**	☐
1) operates if a machine room door, pulley room door, inspection door, emergency door, inspection trap or cabinet door is opened in accordance with EN 81-71:2005, **5.2.6**.;	**N/A**	☐	**Yes**	☐
2) operates an audible alarm within 30 s after opening any of the doors in 1) in accordance with EN 81-71:2005, **5.2.6**.;	**N/A**	☐	**Yes**	☐
3) is audible at the intrusion point and the main access floor at a volume level of 70 dB(A) to 85 dB(A) in accordance with EN 81-71:2005, **5.2.6a)**;	**N/A**	☐	**Yes**	☐
4) stops automatically between 5 min and 15 min from activation in accordance with EN 81-71:2005, **5.2.6b)**.	**N/A**	☐	**Yes**	☐

Table D.3 – Result of examination and test for lifts – Lifts with features to combat vandalism – Landing and car doors

D.3.1 Landing and car door construction

a)	Confirm that car and landing doors are automatic horizontal sliding power-operated and constructed of materials in accordance with EN 81-71:2005, **5.3.1.1**.			**Yes** ☐
b)	Confirm that car and landing door assemblies have been designed to remain operative when tested in accordance with the shock test specified in EN 81-71:2005, **5.3.1.2**.			**Yes** ☐
c)	Confirm that doors have been provided with a retaining device capable of withstanding the shock test specified in EN 81-71:2005, **5.3.1.3**.			**Yes** ☐
d)	For category 2 lifts, confirm that vision panels have not been used in accordance with EN 81-71:2005, **5.3.1.4**.	**N/A** ☐		**Yes** ☐
e)	For category 2 lifts, confirm that the construction of the car and landing doors and clearances is in accordance with EN 81-71:2005, **5.3.1.5**.	**N/A** ☐		**Yes** ☐
f)	For category 2 lifts, confirm that in addition to the requirements of EN 81-1, **7.2.3.2** it is not possible to pass a rod of 10 mm diameter from the landing side of the entrance into the well.	**N/A** ☐		**Yes** ☐
g)	For category 2 lifts, confirm that where door panels are mechanically linked they cannot be disengaged by unauthorised persons within 60 s with the tools listed in EN 81-71:2005, Annex E.	**N/A** ☐		**Yes** ☐
h)	For category 2 lifts, confirm that the leading edge profile of the car and landing door is formed as an integral part of the door in accordance with EN 81-71:2005, **5.3.1.8**.	**N/A** ☐		**Yes** ☐

D.3.2 Landing door security system – Category 2 lifts only

a)	Confirm that at any floor where the lift is not present it is not possible to open the landing door with the emergency unlocking key described in EN 81-1, **7.7.3.2**, or by using a tool from EN 81-71:2005, Annex E, unless the security system has been deactivated in accordance with EN 81-71:2005, **5.3.2.1**.	**N/A** ☐		**Yes** ☐
b)	Confirm that a device to manually active and de-activate the system is provided in the machine room, the control cabinet or the emergency and inspection panel in accordance with EN 81-71:2005, **5.3.2.2**.	**N/A** ☐		**Yes** ☐

D.3.2 Landing door security system – Category 2 lifts only *(continued)*

c)	Confirm that the device and the main lift entrance floor have been labelled with a pictogram in accordance with EN 81-71:2005, Annex C.	**N/A** ☐		**Yes** ☐
d)	Confirm that the security system is timer-operated in accordance with EN 81-71:2005, 5.3.2.3.	**N/A** ☐		**Yes** ☐

Table D.3 – Result of examination and test for lifts – Lifts with features to combat vandalism – Landing and car doors

e) Confirm that in the event of mains power failure, the system remains active for a period of not less than 2 h, but in the event of disconnection of the mains switch, the system is immediately deactivated in accordance with EN 81-71:2005, 5.3.2.4.	**N/A** ☐	**Yes** ☐
f) Where the system is installed on:		
1) fire-fighting lifts conforming to EN 81-72:2003, confirm that the system can be deactivated by turning the lift on to "Fire Control" in accordance with EN 81-71:2005, 5.3.2.5.;	**N/A** ☐	**Yes** ☐
2) lifts conforming to EN 81-73, confirm that the system can be deactivated on receipt of an input signal in accordance with EN 81-73:2005, 5.1.1. and EN 81-71:2005, 5.3.2.5.	**N/A** ☐	**Yes** ☐
D.3.3 Door coupling mechanism		
For category 2 lifts, confirm that it is not possible to de-couple the car and landing doors within 60 s with the tools listed in EN 81-71:2005, Annex E.	**N/A** ☐	**Yes** ☐
D.3.4 Door reversal mechanism		
For category 2 lifts, confirm that protective devices for reversal of car and landing doors are inaccessible to unauthorized persons in accordance with EN 81-71:2005, **5.3.4**.	**N/A** ☐	**Yes** ☐
D.3.5 Locking of car doors		
Confirm that the car doors are provided with a locking device in accordance with EN 81-1:1998, 8.9.3.		**Yes** ☐
D.3.6 Manipulation of door operators and locks		
For category 2 lifts, confirm that it is not possible to manipulate the door operator or locks within 60 s with the tools listed in EN 81-71:2005, Annex E.	**N/A** ☐	**Yes** ☐

Table D.4 – Result of examination and test for lifts – Lifts with features to combat vandalism – Car

D.4.1 Car bodywork, interior and fixings				
a) Confirm that the car walls have a mechanical strength in accordance with EN 81-71:2005, **5.3.1.2**.			**Yes**	☐
b) For category 1 lifts, confirm that car ceilings can support a mass of 150 kg at any point a person can suspend themselves, and are fixed such that they cannot be displaced within 60 s with the tools listed in EN 81-71:2005, Annex E.	**N/A**	☐	**Yes**	☐
c) For category 2 lifts, confirm that the ceiling is such that no person can suspend themselves in accordance with EN 81-71:2005, **5.4.1.3**..	**N/A**	☐	**Yes**	☐
d) Confirm that materials used for the car construction and finishes conform to EN 81-71:2005, **5.4.1.4**.			**Yes**	☐
e) Confirm that car bodywork is resistant to being cut through with the tools listed in EN 81-71:2005, **5.4.1.5** and Annex E.			**Yes**	☐
f) Confirm that car flooring has been fixed so as not to create a tripping hazard if cut in accordance with EN 81-71:2005, **5.4.1.6**.			**Yes**	☐
g) For category 2 lifts, confirm that any handrail is capable of supporting at its most unfavourable point a load of 2 500 N applied in any direction in accordance with EN 81-71:2005, **5.4.1.7**.	**N/A**	☐	**Yes**	☐
h) For category 2 lifts, confirm that any mirror is flush fitted and laminated if made from glass in accordance with EN 81-71:2005, **5.4.1.8**.	**N/A**	☐	**Yes**	☐
i) Confirm that fixtures and fittings are removable only with special tools (category 1 lifts) or have fixings not visible to users (category 2 lifts) in accordance with EN 81-71:2004, **5.4.1.9**.			**Yes**	☐
D.4.2 Car emergency doors and trapdoors				
For category 2 lifts, confirm that emergency doors or trapdoors have been provided with a security system in accordance with EN 81-71:2005, **5.3.2**.	**N/A**	☐	**Yes**	☐
D.4.3 Car ventilation				
Confirm that normally accessible ventilation has been guarded against a straight rod being pushed through in accordance with EN 81-71:2005, **5.4.3**.			**Yes**	☐

Table D.4 – Result of examination and test for lifts – Lifts with features to combat vandalism – Car

D.4.4 Car lighting	
a) Has permanent car lighting been provided to give 100 lux minimum at control devices and at floor level in accordance with EN 81-71:2005, **5.4.4.1**?	**Yes** ☐
b) Confirm that car light fittings:	
1) are flush fitted without visible fixings in accordance with EN 81-71:2005, **5.4.2**;	**Yes** ☐
2) remain functional and unbroken when tested in accordance with EN 81-71:2005, Annexes B and F.	**Yes** ☐

Table D.5 – Result of examination and test for lifts – Lifts with features to combat vandalism – Car and landing fixtures

D.5.1 Car and landing controls	
a) Confirm that control buttons, indicators and other fixtures are water resistant in accordance with EN 60529:1992, IPX3 in accordance with EN 81-71:2005, 5.5.1.1.	**Yes** ☐
b) Confirm that the button/bezel gaps been reduced to a minimum to avoid jamming in accordance with EN 81-71:2005, 5.5.1.2.	**Yes** ☐
c) Confirm that control buttons, indicators and other fixtures are resistant to impact in accordance with EN 81-71:2005, Annex B and 5.5.1.3.	**Yes** ☐
d) Confirm that control buttons, indicators and other fixtures are resistant to being cut with the tools listed in EN 81-71:2005, Annex E and 5.5.1.4.	**Yes** ☐
e) Confirm that control buttons, indicators and other fixtures are resistant to flame in accordance with EN 81-71:2005, Annex F and 5.5.1.5.	**Yes** ☐
D.5.2 Car and landing control stations	
a) Confirm that car operating panels and landing control stations are:	
i) removable only with special tools (category 1 lifts) or have fixings not visible to users (category 2 lifts) in accordance with EN 81-71:2005, 5.4.1.9.	**Yes** ☐
ii) made from flame-resistant materials (category 1 lifts) or inflammable (category 2 lifts) in accordance with EN 81-71:2005, 5.4.1.4.	**Yes** ☐
iii) resistant to impact in accordance with EN 81-71:2005, Annex B.	**Yes** ☐
iv) resistant to being cut with the tools listed in EN 81-71:2005, Annex E.	**Yes** ☐

Table D.5 – Result of examination and test for lifts – Lifts with features to combat vandalism – Car and landing fixtures

b) Confirm that signs and marking accessible to the public are resistant to flame in accordance with EN 81-71:2005, Annex F.	**Yes** ☐
D.5.3 Position indicators	
Confirm that a position indicator has been provided at the main floor in accordance with EN 81-71:2005, 5.5.3.	**Yes** ☐

Table D.6 – Result of examination and test for lifts – Lifts with features to combat vandalism – Alarm sounder

a) Confirm that unless the car is at a floor with the doors open, operation of the alarm button causes an audible alarm for 60 s within the car at a volume of 70 dB(A) to 85 dB(A) in accordance with EN 81-71:2005, **5.6a)**.	**Yes** ☐
b) Confirm that the audible alarm ceases if the car doors open during the sounding of the alarm in a).	**Yes** ☐

Table D.7 – Result of examination and test for lifts – Lifts with features to combat vandalism – Steel work

For category 2 lifts, confirm that measures to prevent corrosion of the car sling, car and landing doors, landing door locks and car walls and floor have been provided in accordance with EN 81-71:2005, **5.7**.	**N/A** ☐	**Yes** ☐

Table D.8 – Result of examination and test for lifts – Lifts with features to combat vandalism – Signs and markings

a) Confirm that signs and marking accessible to the public are fixed in a manner that prevents removal and cannot be made illegible within 60 s with the tools listed in EN 81-71:2005, Annex E.	**Yes** ☐
b) Confirm that signs and marking accessible to the public are resistant to flame in accordance with EN 81-71:2005, Annex F.	**Yes** ☐

Table D.9 – Result of examination and test for lifts – Lifts with features to combat vandalism – Documentation

Confirm that the user manual contains information relating to the special features of the vandal-resistant lift, for both the owner and maintenance company.	**Yes** ☐

APPENDIX H - EN 81-28 – ALARM SYSTEM

When a lift is installed in accordance with the Lifts Directive a test of the alarm device is required to show conformity to the ESR 4.5.

Confirm that in the technical dossier of the lift is present the declaration of conformity of the manufacturer of the alarm system, according to standard EN 81-28.			Yes	☐	No	☐
Confirm that the emission of alarm information to the alarm equipment transmitter is not delayed, except during filtering.			Yes	☐	No	☐
Confirm that the alarm system accepts communication from the rescue service until the end of the alarm has occurred.			Yes	☐	No	☐
Check that the means to initiate the end of alarm is out of the reach of any non-competent person.			Yes	☐	No	☐
Confirm that no alarm is impeded or lost in cases of electrical power supply switching or power supply failure.			Yes	☐	No	☐
Confirm that after the operation of the alarm initiation device, no further action from the trapped users is necessary.			Yes	☐	No	☐
Confirm that after the initiation of the alarm, the trapped users are not able to interrupt the two-way communication.			Yes	☐	No	☐
Confirm that the user can always, during an alarm, re-initiate connection to the rescue service should this be necessary.			Yes	☐	No	☐
Confirm that the alarm equipment is not accessible to passenger(s) in accordance with EN 81-28:2003, 4.2.4.			Yes	☐	No	☐

REPORT

ABOUT

EXAMINATIONS AND TESTS
ON AN INSTALLED
HYDRAULIC LIFT

CARRIED OUT IN ACCORDANCE WITH
Lifts Directive, Annexes VI, X, XII, XIII and XIV

to establish conformity with the provisions of the Lifts Directive

The installation is based on

☐ a lift with EC Type examination (Art. 8 (2) i & ii)

☐ design of a type in accordance with Annex XIII (Art. 8 (2) iii)

☐ With or ☐ Without Design Examination

☐ a lift with Unit Verification (Art. 8 (2) iv)

☐ design in accordance with Annex XIII (Art. 8 (2) v)

☐ With or ☐ Without Design Examination

IDENTIFICATION OF THIS REPORT

This Test Report is composed by 34 pages and the following Annexes:

- ☐ Annex A : Additional Requirements for Unit Verification
- ☐ Annex B1 : Machinery inside the well : working area in the car or car roof
- ☐ Annex B2 : Machinery inside the well : working area in the pit
- ☐ Annex B3 : Machinery inside the well : working area on a platform
- ☐ Annex B4 : Working area outside the well
- ☐ Annex B5 : Machinery outside the well
- ☐ Annex B6 : Specific checks with respect to EN 81-1 + A3
- ☐ Annex C : Additional requirements for lifts designed according to EN 81-70
- ☐ Annex D : Additional requirements for lifts designed according to EN 81-72
- ☐ Annex E : Additional requirements for lifts designed according to EN 81-21
- ☐ Annex F : Additional requirements for lifts designed according to EN 81-73
- ☐ Annex G : Additional requirements for lifts designed according to EN 81-71
- ☐ Annex H : Alarm System according to EN 81-28

INTRODUCTION

1. It is the purpose of this report to be used as a means to facilitate the proof of having carried out the necessary examinations and tests to show the compliance with the Lifts Directive before putting a new lift into service.

2. According to practice in Europe, details of the compliance with the Lifts Directive are related to fulfilling the requirements of the Harmonised Standard EN 81-1:1998 + A2/2004. + A3/2009 Therefore this report is based on the requirements of this standard. The drafting committee for this report consider that the limited tests and examinations described in Annex D2 of EN81-1:1998 + A2/2004 + A3/2009 and included in this report are not sufficient on their own to verify compliance with the harmonised standard. Furthermore the tests and examinations in this report are intended to ensure that the requirements of Annex D1 are also satisfied. This does not exclude other solutions, provided the same safety level has been reached.
   Some Annexes are provided to verify lifts designed according to the following standards : EN 81-21, EN 81-70, EN 81-71, EN 81-72, EN 81-73, EN 81-28.

3. The format of this report does not specify how the examinations or tests have to be carried out. It is assumed that the examinations and tests are carried out in accordance with approved engineering practice (state of the art) and, where necessary, with instruments being in line with the provisions in the relevant approved QM-system.

4. The sequence of examinations and tests stated within this report have been arranged for the safety of the person conducting the test. Each stage once completed successfully helps to increase the level of safety of the following tests.

5. This document has been compiled by a group of experts representing manufacturers and notified bodies (NB). This work was requested by the NB-L/HC in its meeting 99-05-11/12.

6. Attention shall be paid to possible differences in the lift installation due to national regulations not touched by the LD.

7. This report should be retained by the Notified Body and/or the Installer carrying out these tests

Documents Required

The following documentation may be required in order for the person conducting the tests to be able to fully complete the rest of this report. :-

General description of the lift installation if not already included in this document

Architectural plans with regard to the shaft, machinery or pulley room, landings and access to these areas (clearly dimensioned)

User Handbook

- Mechanical general arrangement drawings
- Electrical and Hydraulic circuit diagrams
- Instructions for use of the lift
- Maintenance instructions
- Requirements for periodic inspections
- Logbook for registration of all maintenance and alterations
- Emergency procedures
- EC declarations of conformity of relevant safety components as listed in Annex IV of the Lifts Directive (95/16/EC) or a list from which these may be identified.

Certification

- Quality Assurance Certification (if applicable)
- EC Type Examination of Model Lift
- Notified Body Design Examination for deviations from Harmonised Standards
- Fire Rating Certification for Landing Doors (National Requirement)
- Testing/Suitability of Glass Panels
- Rope and Chain Certificates
- Alarm device according to EN 81-28 (e.g. statement of compliance by manufacturer)

Information

- Type Tested Safety Components ~ range of use, correct installation procedures and special testing procedures.
- National Regulations which need to be respected.
- Contract specific negotiations, such as accessibility for certain groups of users (the handicapped / the elderly). Whilst conformity with these items is not the responsibility of the Notified Bodies they may effect the design of the lift and therefore its compliance with the Lifts Directive.
- Risk Analysis in the case of Unit Verification.

Note : The drawings used for the installation and testing process may be subject to minor alteration due to changes in site conditions. It should be noted that “as built” drawings are required as part of the handover documentation to be provided to the owner of the lift.

The EMC conformity should be confirmed during the test.

In the following document shaded areas shown thus denote tests which must be carried out on site. Any box which is not shaded allows for the installer to provide the examiner with this information prior to the tests being carried out providing that they have the necessary Quality Assurance system. If the installer has no

recognised Quality Assurance system then all tests must be conducted on site.

In the case of Final Inspection (annex vi) or similar the following information shall be provided :

- EC Type Examination Certificate Number
- Document providing equivalent information to the Type Examination Certificate in case of Article 8 (2) iii Number
- Design Examination Certificate Number

Lift Installer Details Responsible For Design

Name:
Address:

Notified Body No.
(where applicable)

Lift Installer Details

Name:
Address:

Notified Body No.
(where applicable)

Notified Body Carrying Out Inspection

Name:
Address:

Notified Body No.
(where applicable)

Location of Installed Lift

Name:
Address:

* Lift Identification No.	
*Lift Type (Model)	
* Year of Manufacture	

* The above details to be taken from the installers plate inside the car.

1 Description of the Lift Installation

1.1 Length of travel		m		
1.2 No of levels served	Total			
1.3 No of landing doors	Front			
	Rear			
	Side			
1.4 Rated load		kg	Persons	
1.5 Rated speed		m/s		
1.6 Machine room location (at which level)	Above well			
	Below well			
	Side of well			
	Remote			
	Other			
1.7 Type of Jack			(pushing, pulling, telescopic etc.)	
1.8 Jack Location	Side of car			
	Under Car			
	Other			
1.9 No. of Jacks				
1.10 Jack Arrangement	Direct Acting		Indirect Acting	
1.11 Suspension Type	Ropes		Chains	
1.12 Balancing Weight Position	Side of Car			
	Rear of Car			
1.13 Mass of Balancing Weight		Kg		
1.14 Mass of Empty Car		Kg		
1.15 Type of Oil			(ISO 46, ISO 68 etc.)	
1.16 Full Load Pressure		MPa	**	

Note : 1 MPa = 10^6 N/m^2 = 10 bar = 145,038 lbf/in^2

1 Description of the Lift Installation (continued)

1.17 Plan(s) of the well and machine/pulley room : Drawing No.(s)

1.18 Electric Circuit Diagram(s) Drawing No.(s)

1.19 Hydraulic Circuit Diagrams(s) Drawing No.(s)

1.20 Confirm that the plans or other documents contains information relating to :- Yes ☐ No ☐

Loads and forces imposed on the building
Indication of the well enclosure
Dimensions of pit and headroom
Location of the machine room and its access door
Accessible spaces under the well
Fixation points of guide rails

1.21 Precautions against creeping

Mechanical

Electrical

1.22 Power supply:

Specified	Actual at time of test	
V	V	Voltage
		Phase
Hz		Hz
		Wire (3,4 or 5)
		Fuse Type
A	A	Fuse Rating

1.23 Specifications relating to negotiations

Duration of fire rating of landing doors min

Fire Fighting Lift Yes ☐ No ☐

Accessibility for Disabled Yes ☐ No ☐

Vandal Resistance Yes ☐ No ☐

Other Yes ☐ No ☐

1.24 Verification of Conformity

The following are items not fully conforming to the Harmonised Standard EN81-2:1999

Design Inspection N/A ☐ Approval No.

Refuge Space approval by Member State (annex 2.2) N/A ☐ Approval No.

1 Description of the Lift Installation (continued)

1.25 List Of Used Safety Components			**EC Type Examination Certificate No.**	**Notified Body No.**
Device for Locking Landing Door				
Device to prevent the lift car from falling (safety gear)	N/A	☐		
Overspeed Limitation Device (speed governor)	N/A	☐		
Buffers - Energy Accumulation – Non Linear	N/A	☐		
- Energy Accumulation – Buffered Return	N/A	☐		
- Energy Dissipation	N/A	☐		
Hydraulic Rupture Valve	N/A	☐		
Electric Safety Switches containing electronic components	N/A	☐		

2.0 Machine and Pulley Room

2.1 Main Switch Specified A

(a) Confirm that the main switch is in accordance with that specified Yes ☐ No ☐

(b) Confirm that the main switch control mechanism is easily identifiable and accessible from the machine room doorway (see 13.4.2 of EN.81-2) Yes ☐ No ☐

(c) Confirm that it is lockable in the OFF position (See 13.4.2 of EN.81-2) Yes ☐ No ☐

2.2 Lighting & Socket Outlets Lux Rating

Confirm that these conform to 6 and 13.6 of EN.81-2 Yes ☐ No ☐

2.3 Dimensions

Confirm these are in accordance with the minimum figures in 6.3.2 of EN.81-2 Yes ☐ No ☐

2.4 Access

Confirm there is safe access as defined in 6.2 of EN.81-2 Yes ☐ No ☐

2.5 Safety Signs

Confirm that notices and signs are in place according to 15.4 of EN.81-2 Yes ☐ No ☐

2.6 Lift Machine Manufacturer Type Specified

Confirm that the correct lift machine is supplied Yes ☐ No ☐

2.7 Controller Type Manufacturer Type Specified

Confirm that the correct controller is supplied Yes ☐ No ☐

2.8 Emergency Release

(a) Confirm that the emergency operation system(s) function(s) correctly in accordance with 12.9 of EN.81-2 Yes ☐ No ☐

(b) Confirm that the instructions called for in 15.4.3 of EN.81-2 are displayed Yes ☐ No ☐

2.9 Machine Room Ventilation

Confirm that the machine is room ventilated as called for in 6.3.5 of EN.81-2 Yes ☐ No ☐

2.0 Machine and Pulley Room (continued)

2.10 Doors/Trap Doors

Confirm that the machine room doors or trap doors are fitted with a suitable lock conforming to 6.3.3.3 of EN.81-2 — Yes ☐ No ☐

2.11 Communication

Confirm that there is a communication device in place and working as called for in 14.2.3.4.of EN.81.2 — N/A ☐ Yes ☐ No ☐

2.12 Openings into the well

Confirm that protection against objects and/or persons falling into the well from the machine room has been provided (see 6.3.4 of EN.81-2) — N/A ☐ Yes ☐ No ☐

2.13 Lifting Accessories

Confirm that, where necessary, means for lifting heavy components are available and correctly marked (see 6.3.7 of EN.81.2) — N/A ☐ Yes ☐ No ☐

2.14 Multiple Lifts

Confirm that where multiple lifts have been installed into a common machine room components have been marked identifying the lift to which the components belong (see 15.17 of EN.81-2) — N/A ☐ Yes ☐ No ☐

2.15 Confirm the safety chain has been tested to ensure that an earth fault will cause disconnection without delay (14.1.1.1.d of EN.81-2) — Yes ☐ No ☐

2.16 Confirm that the phase reversal protection functions correctly (14.1.1.1.j of EN.81-2) — Yes ☐ No ☐

2.17 Confirm that there is no equipment not related to the safe operation of the lift in these spaces (6.1.1 of EN.81-1) — Yes ☐ No ☐

3.0 The Well

3.1 Clearances and run-bys

NOTE : In (a), (b) & (f) below $h = 0.035v^2$ for indirect acting lifts. In the case of direct acting lifts the value h = 0 (see 5.7.1.1 f. EN.81-2)

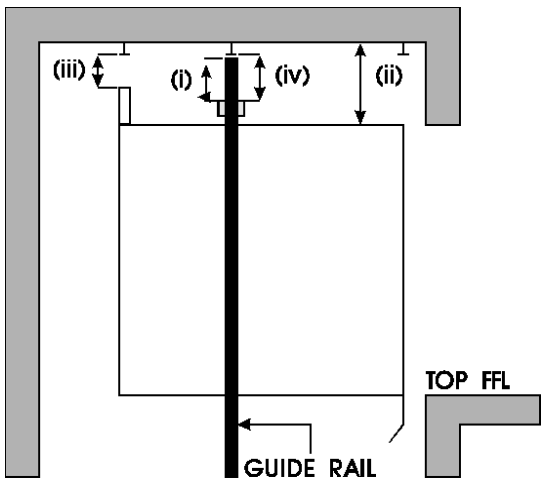
(a) With the ram in its ultimate position confirm with reference to Fig. 1 that :

	Specified	Measured Distance
(i) The rail lengths will accommodate a further guided travel of at least (0.1+ h) m (see 5.7.1.1a of EN.81-2)	m	m
(ii) The dimension from the standing area on the car roof to the lowest part of the ceiling of the well above this area is at least (1.0+ h) m. (see 5.7.1.1.b of EN.81-2)	m	m
(iii) The free vertical distance between the lowest part of the ceiling of the well and the highest item of equipment on the car roof (excluding (iv) below) is at least (0.3+ h) m (see 5.7.1.1.c.1 of EN.81-2)	m	m
(iv) The free vertical distance between the lowest part of the ceiling of the well and the highest part of the guide shoes/rollers, rope attachments/header or parts of vertically sliding doors should be at least (0.1+ h) m (see 5.7.1.1.c.2 of EN.81-2)	m	m

Confirm that there is sufficient space above the car to accommodate a rectangular block 0.5m x 0.6m x 0.8m (see 5.7.1.1.d of EN.81-2) Yes ☐ No ☐

Confirm that in the case of indirect acting lifts there is at least 0.1m Above the ram to the first striking point. (see 5.7.1.1.e of EN.81-2) Yes ☐ No ☐

Figure 1



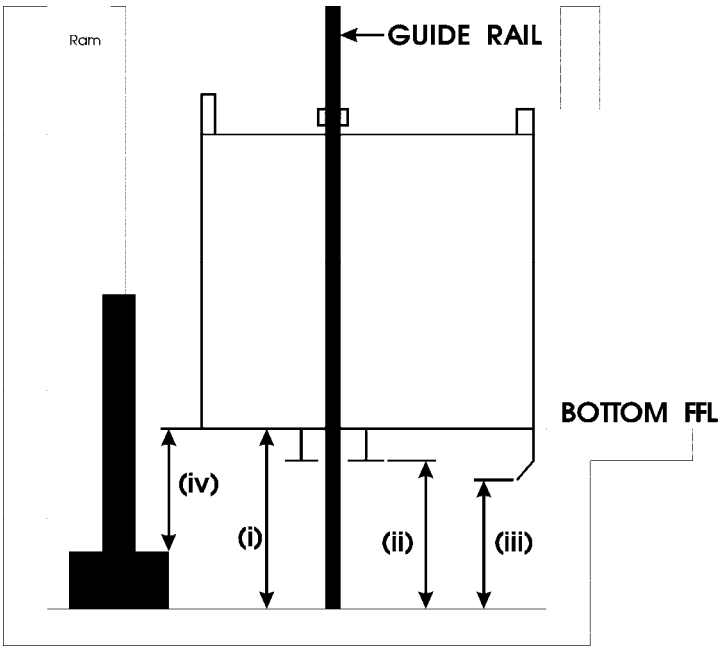
3.0 The Well (continued)

	Specified	Measured Distance
(b) With the car resting on its fully compressed buffers confirm that the further guided travel of the balancing weight is at least (0.1+ h) m. (see 5.7.1.2 of EN.81-2)	m	m

(c) When the car rests on its fully compressed buffers confirm (see Fig.2) there is:

(i) Sufficient space below the car to accommodate a rectangular block 0.5m x 0.6m x 1.0m (see 5.7.2.3.a of EN.81-2), resting on one of its faces.	Yes ☐	No ☐
(ii) A free vertical distance between the bottom of the pit and the lowest part of the car (excluding the area in (iii) below) of at least 0.5m (see 5.7.2.3.b of EN.81-2)	m	m
(iii) A free vertical distance of not less than 0.1m within a horizontal distance of 0.15m between (1) the apron or parts of the vertical sliding door and adjacent walls and (2) the lowest parts of the car and the guide rails. (see 5.7.2.3.b of EN.81-2).	m	m
(iv) Except for items in (iii) above, a free vertical distance between highest parts in the pit and the lowest part of the car of at least 0.3m. (see 5.7.2.3.c of EN.81-2)	m	m

Figure 2



3.0 The Well (continued)

(d) Confirm that in the case of an inverted jack the distance between the ram head and the first striking point in the pit is at least 0.5m (0.1m with a screen) (see 5.7.2.3.d of EN.81-2

N/A ☐ Yes ☐ Actual m

(e) Confirm that In the case of a telescopic jack with a guided yoke confirm there is 0.5m between the lowest yoke and the pit floor with the jack fully collapsed (see 5.7.2.3.e of EN 81-2)

N/A ☐ Yes ☐ Actual m

(f) Confirm that with the jack fully extended there is further guided travel for the balancing weight of at least (0.1 + h)m. (see 5.7.2.4 of EN.81-2)

N/A ☐ Yes ☐ Actual m

3.2 Buffers

Specified

Confirm that the car buffers are in accordance with what is specified

Number Installed

Yes ☐ No ☐

3.2.1 Energy Accumulation Buffers

When the car with its rated load is placed on the buffer(s), the ropes being made slack, confirm that the compression corresponds to that given by the characteristic curve of the buffer (as provided by the buffer supplier or lift supplier): (see Annex D.2.n of EN.81-2).

N/A ☐ Yes ☐ No ☐

3.2.2 Energy Accumulation Buffers (Non-Linear Type)

Confirm that the buffer has been CE marked

N/A ☐ Yes ☐ No ☐

3.2.3 Energy Dissipation Buffers (Oil Type)

When the car with its rated load is brought into contact with the buffer at the speed for which the buffer is designed (see 10.4.3.2.c of EN.81-2) confirm that no deterioration occurs to the lift.

N/A ☐ Yes ☐ No ☐

Confirm that the buffer has been CE marked

Yes ☐ No ☐

3.0 The Well (continued)

3.3 Protection in the well

(a) Confirm that in the case of a fully enclosed well there are no gaps in the enclosure other than those listed in 5.2.1.1 of EN.81-2	N/A	☐	Yes	☐	No	☐
(b) Confirm that a rigid balancing weight screen has been fitted and that the balance weight is a minimum of 50mm clear of the car (see 5.6.1 and 11.3 of EN.81-2)	N/A	☐	Yes	☐	No	☐
(c) Confirm that in the case of adjacent lifts there is a screen in the pit extending to a height of 2.5m above the lowest landing floor (see 5.6.2.1 of EN 81-2)	N/A	☐	Yes	☐	No	☐
(d) Confirm that when the horizontal distance between the edge of the car roof and any moving parts of adjacent lifts is less than 0.5m there is a full height screen (see 5.6.2.2 of EN.81-2)	N/A	☐	Yes	☐	No	☐
(e) Confirm that the ram head of an inverted jack is screened in accordance with 5.7.2.3.d of EN.81-2	N/A	☐	Yes	☐	No	☐
(f) Confirm that the inspection doors and inspection traps fulfil the requirements of 5.2.2 of EN.81-2	N/A	☐	Yes	☐	No	☐
(g) Confirm that the access to the pit fulfils the requirements of 5.7.2.2 of EN.81-2			Yes	☐	No	☐
(h) Confirm In the case of partially enclosed wells imperforate screening in accordance with figure 1 of 5.2.1.2 of EN.81-2 has been provided	N/A	☐	Yes	☐	No	☐
(i) Confirm that all other requirements of 5.2.1.2 of EN.81-2 have been satisfied	N/A	☐	Yes	☐	No	☐
(j) Confirm that any ventilation provided conforms to 5.2.3 of EN.81-2			Yes	☐	No	☐
(k) Confirm that the wall facing the car entrance conforms with the requirements of 5.4.3 of EN.81-2			Yes	☐	No	☐
(l) Confirm that there are no objects/services well except for those associated with the lift (see 5.8 of EN.81-2)			Yes	☐	No	☐
(m) Confirm that if there are accessible areas under the pit suitable precautions have been taken. (see 5.5 of EN.81-2)	N/A	☐	Yes	☐	No	☐
(n) Confirm that rotating pulleys in the well have been guarded (see 9.6 of EN.81.2)	N/A	☐	Yes	☐	No	☐
(o) Confirm that the final limit switches are correctly positioned and operate satisfactorily (10.5 of EN.81-2)			Yes	☐	No	☐
(p) Confirm that the stopping device in the pit has been positioned correctly and proved (5.7.2.5 and 14.2.2.1 of EN81-1)			Yes	☐	No	☐
(q) Confirm that the well meets the requirements of 5.3 of EN81-1, particularly in the case of glass			Yes	☐	No	☐

3.0 The Well (continued)

3.4 Landing Door Assemblies

(a) Confirm that the running clearance between the door panels and between panels and uprights, lintels or sills is less than or equal to 6mm (7.1 of EN.81-2) — Yes ☐ No ☐

(b) Confirm that no recess or projection on the face of power operated automatic sliding door panels exceeds 3mm (7.5.1 of EN.81-2) — N/A ☐ Yes ☐ No ☐

(c) Is a fire test certificate required, if so is it available, complete and correct? — N/A ☐ Yes ☐ No ☐

(d) If the answer to (c) is Yes are the landing doors correctly fire rated for the installation? — Specified: Makers Type ____ Rating ____ min — Yes ☐ No ☐

(e) Confirm that where glass panels (excluding vision panels) are used they are correctly marked in accordance with clause 7.2.3.5 of EN.81-2 — NA ☐ Yes ☐ No ☐

(f) Confirm that where glass panels (excluding vision panels) are used they conform in size and fixing to annex J of EN.81-2 or have a pendulum test certificate available, complete and correct. — NA ☐ Yes ☐ No ☐

(g) Confirm that one of the options for child protection in 7.2.3.6 of EN.81-2 has been adopted — N/A ☐ Yes ☐ No ☐

(h) Confirm that vertically sliding doors conform to the requirements of 7.4.3 and 7.5.2.2 of EN.81-2 — N/A ☐ Yes ☐ No ☐

3.5 Landing Door Locks and Contacts

(a) Confirm that the correct door locks are fitted (see **1.25**) — Yes ☐ No ☐

(b) Confirm that all the door locks are CE marked — Yes ☐ No ☐

(c) Confirm that the contacts at each landing door have been proved so that when broken they stop and prevent movement of the car outside the unlocking zone (7.7.4 of EN.81-2) — Yes ☐ No ☐

(d) Confirm that the mechanical locks at each landing door have been proved for positive locking (7.7.5 of EN.81-2) — Yes ☐ No ☐

(e) Confirm that all electrical safety devices on the landing door panels, which are not directly mechanically linked, operate correctly (see 7.7.6.2 of EN.81-2). — N/A ☐ Yes ☐ No ☐

3.0 The Well (continued)

3.6 Lighting and Socket Outlet

(a) Confirm that the well lighting level is in accordance with 5.9 and 13.6 of EN.81-2 lux ☐ Yes ☐ No ☐

(b) Confirm Are the terminal light fittings less than 0.5m from the pit floor and ceiling (see 5.9 of EN.81-2) Yes ☐ No ☐

(c) Confirm that the lights can be switched from both the pit and machine room (see 13.6.3.2 of EN.81-2) Yes ☐ No ☐

(d) Confirm that a socket outlet has been provided in the pit (see 5.7.2.5 of EN.81-2) Yes ☐ No ☐

3.7 Car and Balancing weight / Ram Guide Rails

		Specified	Actual
(a) Is the size of the guide rails in accordance with that specified?	Car		
	Bwt / Ram		

(b) Confirm the distance between the rail fixings is in accordance with the layout drawing

Car		Yes ☐	No ☐
Bwt / Ram	N/A ☐	Yes ☐	No ☐

(c) Confirm that where the guides are lubricated it is in accordance with the EC type test certification of the safety gear N/A ☐ Yes ☐ No ☐

4.0 The Car, Inspection Operation & Entrance Clearances

4.1 The Car

		Specified		Actual	
(a) Confirm that the available floor area, related to rated load and maximum number of passengers, conforms to 8.2 of EN.81-2		m^2		m^2	
(b) Confirm that the inside of the car is greater than 2.0m in height		Yes ☐		No ☐	
(c) Confirm that where glass panels are used, each panel is correctly marked in accordance with 8.3.2.4 of EN.81-2					
(1) Doors	N/A ☐	Yes ☐		No ☐	
(2) Walls	N/A ☐	Yes ☐		No ☐	
(d) Confirm that where glass panels are used a handrail conforming to 8.3.2.2 of EN81-1 has been fitted.	N/A ☐	Yes ☐		No ☐	
(e) Confirm that one of the options for child protection in 8.6.7.5 of EN.81-2 has been adopted	N/A ☐	Yes ☐		No ☐	
(f) Confirm that the maximum load and makers name is indicated In the car (i.e. Number of persons load in kg and identification no.) and it complies with 15.2.1 and 15.2.2 of EN.81-2		Yes ☐		No ☐	
(g) Confirm that the emergency alarm device allows for two-way verbal communication with a rescue service according to EN 81-28. (See Annex H)		Yes ☐		No ☐	
(h) Confirm that the lighting in the car gives a minimum of 50 lux At floor level and on the controls (see 8.17.1 of EN.81-2)		Yes ☐		No ☐	
(i) Confirm that the emergency lighting in the car stays illuminated for at least 1h. (see 8.17.4 of EN.81-2)		Yes ☐		No ☐	
(j)Confirm that the car overload device operates in accordance with clause 14.2.5 of EN.81-2		Yes ☐		No ☐	
(k) Confirm that the apron conforms to 8.4 of EN.81-2		Yes ☐		No ☐	
(l) Confirm that any emergency doors or trap door comply with 8.12 of EN.81-2	N/A	Yes ☐		No ☐	
(m) Confirm that ventilation has been provided in the car (see 8.16 of EN.81-2)		Yes ☐		No ☐	
(n) Confirm that the car walls are imperforate except for ventilation apertures (see 8.16 of EN.81-2)		Yes ☐		No ☐	

4.0 The Car, Inspection Operation & Entrance Clearances (continued)

4.2 Car Top

(a) Confirm that the car top has been fitted with controls, stopping devices and socket outlet in accordance with 8.15 of EN.81-2		Yes ☐	No ☐
(b) Confirm that the car top station is constructed and operates in accordance with 14.2.1.3 of EN.81-2		Yes ☐	No ☐
(c) Confirm that the alarm device in 5.10 of EN.81-2 operates Correctly (See Annex H)	N/A	Yes ☐	No ☐
		Specified:	
(d) Confirm that the balustrade on the car roof is in accordance with 8.13.3 of EN.81-2	N/A	Yes ☐	No ☐
(e) Confirm that the car roof has one clear area for standing (see 8.13.1 of EN.81-2)		Yes ☐	No ☐
(f) Confirm that any pulleys have been guarded (see 9.4 of EN.81-2)		Yes ☐	No ☐
(g) Confirm that the roof of the car has been designed to take the weight of two persons Note :- Only where visual inspection suggests non-compliance should the car roof be subjected to further examination)		Yes ☐	No ☐
(h) Confirm that the stopping devices on the car top have been positioned correctly and proved so that when operated they stop and prevent movement of the car (8.15.b and 14.2.2.1 of EN81-2)		Yes ☐	No ☐

4.0 The Car, Inspection Operation & Entrance Clearances (continued)

4.3 Car Entrance Clearances

(a) Confirm that the running clearance between the door panels and between panels and uprights, lintels or sills is less than or equal to 6mm (8.6.3 of EN.81-2) Yes ☐ No ☐

(b) Confirm that no recess or projection on the face of power operated automatic sliding door panels exceeds 3mm (8.7.1 of EN.81-2) N/A ☐ Yes ☐ No ☐

(c) Confirm that the horizontal distance between the sill of the car and the sill of the landing doors 35mm or less (see 11.2.2 of EN.81-2) Yes ☐ No ☐

(d) Confirm that where there is a hinged landing door and a folding car door the clearances between them do not exceed 150mm (see 11.2.4 of EN.81.2) N/A ☐ Yes ☐ No ☐

(e) Is the distance between the inner surface of the well and the sill or framework of the car entrance or door 0.15m or less, or 0.2m if over a height not exceeding 0.5m? (11.2.1 of EN.81-2) Yes ☐ No ☐

(f) If the answer to (e) is NO, is the car door mechanically locked when away from the unlocking zone in accordance with 11.2.1. c of EN.81-2)? N/A ☐ Yes ☐ No ☐

4.4 Landing and Car Door Tests

Note: Where appropriate, the following tests should be carried out with the car and landing doors coupled.

If the doors are manual answer f, h, i, j, k, l, m, n, Front ☐ Alternate ☐

If the doors are power operated answer all except n, Front ☐ Alternate ☐

(a) Confirm the maximum force to prevent closing is 150N or less (7.5.2.1.1.1/8.7.2.1.1.1 of EN.81-2) Yes ☐ No ☐

(b) Confirm that with a mechanical force of 150N the clearances defined in 7.1 of EN.81-2 do not exceed 30mm for side opening doors or 45mm for centre opening doors (7.2.3.2 of EN.81-2) Yes ☐ No ☐

(c) Confirm that the kinetic energy is 10J or less (see 7.5.2.1.1.2/8.7.2.1.1.2 of EN.81-2) Yes ☐ No ☐

(d) Confirm that all the protective devices reverse the doors in accordance with 7.5.2.1.1.3/8.7.2.1.1.3 of EN.81-2) N/A ☐ Yes ☐ No ☐

(e) Confirm that if the doors are able to close with the reversal device inoperative the kinetic energy is less than or equal to 4J (see 7.5.2.1.1.3/8.7.2.1.1.3 of EN.81-2) N/A ☐ Yes ☐ No ☐

4.0 The Car, Inspection Operation & Entrance Clearances (continued)

(f) Confirm that the unlocking zone is 0.2m or less above and below landing levels (or 0.35 in the case of simultaneously operated car and landing doors (7.7.1 of EN.81-2)		Yes ☐	No ☐
(g) Confirm that the automatic self closing mechanism functions correctly (7.7.3.2 of EN.81-2)		Yes ☐	No ☐
(h) Confirm that each set of landing doors is capable of being unlocked from the outside with an emergency key (7.7.3.2 of EN.81-2)		Yes ☐	No ☐
(i) Confirm that the car doors can be manually opened within the unlocking zone with a force of less than 300N with the power off (8.11.2 and Annex B of EN.81-2)		Yes ☐	No ☐
(j) Confirm that in the case of folding doors the maximum force to prevent opening is 150N or less (8.7.2.1.1.4 of EN.81-2)	N/A ☐	Yes ☐	No ☐
(k) Confirm that for vertical sliding doors the requirements of 7.5.2.2.(a), (b) and (d)/8.7.2.2 (b), (c) and (d) of EN.81-2 have been met	N/A ☐	Yes ☐	No ☐
(l) Confirm that if fitted the car door lock functions correctly (8.9.3 of EN.81-2)	N/A ☐	Yes ☐	No ☐
(m) Confirm that the car door contacts have been proved so that when broken there is no car movement outside the unlocking zone (8.9 of EN.81-2)		Yes ☐	No ☐
(n) Confirm that the car here indication conforms to 7.6.2 of EN.81-2 for manual doors	N/A ☐	Yes ☐	No ☐

5.0 Suspension

5.1 Suspension

Direct ☐ Indirect ☐

(a) Suspension ropes N/A ☐

(1) Number Specified

(2) Nominal diameter Specified mm

(3) Lay and construction Specified

(4) **Confirm** that the correct ropes are supplied and that the rope test certificate is available, complete and correct (A copy is sufficient as original will be held by the rope maker) Yes ☐ No ☐

Rope Terminations

(5) Type of terminations Car Well

Balance Weight : N/A ☐

(6) **Confirm** that the rope terminations are correctly made and secure as required in 9.2.3 and 9.2.4 of EN.81-2 Yes ☐ No ☐

(7) **Confirm** that the rope terminations conform to 9.3 of EN.81-2 ensuring distribution of load between the ropes Yes ☐ No ☐

(b) Suspension chains N/A ☐

(1) Number Specified

(2) Nominal Pitch Specified mm

(3) Type and construction Specified

(4) **Confirm** that the correct chains are supplied and that the chain test certificate is available, complete and correct (A copy is sufficient as original will be held by the chain maker) Yes ☐ No ☐

(5) **Confirm** that the chain terminations conform to 9.3 of EN.81-2 ensuring distribution of load between the chains Yes ☐ No ☐

(c) Confirm that where the ram is directly connected to the car the joint is flexible and secure. Yes ☐ No ☐

(d) Suspension Pulleys N/A ☐

	Specified	**Actual**
(1) Pulley Material		
(2) Pulley Diameter	mm	mm

5.0 Suspension (continued)

5.2 Slack Suspension Device

(a) Confirm that in the case of two rope or chain suspension of the car the electrical safety device detecting the extension of one rope/chain operates correctly (see 9.3.3 of EN.81-2)	N/A	☐	Yes	☐	No	☐
(b) Confirm that the slack safety rope detector device operates correctly (see 12.13 of EN.81-2)	N/A	☐	Yes	☐	No	☐

6.0 Controls

(a) Confirm the levelling and relevelling circuits operate correctly (see 14.2.1.2 of EN.81-2)	N/A	☐	Yes	☐	No	☐
and Confirm that the stopping accuracy is according to EN 81-70.	N/A	☐	Yes	☐	No	☐
(b) Confirm that the docking operation functions in accordance with 14.2.1.4.b of EN.81-2	N/A	☐	Yes	☐	No	☐
(c) Confirm the operation of the stopping device in the car (see 14.2.1.5.i of EN.81-2)	N/A	☐	Yes	☐	No	☐
(d) Confirm that safety circuits containing electronic components are CE marked	N/A	☐	Yes	☐	No	☐
(e) Confirm that the electrical anti-creep system operates correctly with rated load in the car (see 14.2.1.5 and Annex D.2.y of EN 81-2)	N/A	☐	Yes	☐	No	☐

7.0 Car & Balancing Weight Safety Gear & Overspeed Protection

7.1 Car Safety Gear

N/A ☐

(a) Confirm that the correct safety gear is supplied (see **1.25**) Yes ☐ No ☐

(b) Confirm that the safety gear has been CE marked Yes ☐ No ☐

(c) Confirm that the safety gear stops the car in the downward direction when operated by the governor and engaging at the appropriate speed with the load uniformly distributed at:

- rated load at rated speed for instantaneous safety gear where Table 1.1 applies (Annex D.2.h.1.a of EN.81-2) N/A ☐ Yes ☐ No ☐

- 125% of rated load at rated speed for instantaneous safety gear where Table 1.1 may not apply (Annex D.2.h.1.b of EN.81-2) N/A ☐ Yes ☐ No ☐

- 125% of rated load at rated speed or lower in the case of progressive safety gear (see Annex D.2.h.2 of EN.81-2) N/A ☐ Yes ☐ No ☐

(d) Confirm that the floor of the lift is horizontal or sloping less than 5% from the horizontal (9.8.7 of EN.81-2) Yes ☐ No ☐

(e) Following the test confirm that no deterioration which could adversely affect the normal use of the lift has occurred (see Annex D.2.h of EN.81-2) Yes ☐ No ☐

(f) Confirm that the electrical safety device on the safety gear operates correctly Yes ☐ No ☐

7.2 Actuation of Safety Gear

7.2.1 Car Overspeed Governor

N/A ☐

(a) Confirm that the correct overspeed governor is supplied (see **1.25**) Yes ☐ No ☐

(b) Confirm that the overspeed governor tripping speed is correct (see 9.10.2.1 of EN.81-2) Yes ☐ No ☐

(c) Confirm the overspeed governor has been CE marked Yes ☐ No ☐

(d) Confirm that the overspeed governor is accessible or is able to be remotely tested and reset. (see 9.10.2.7.2 & 9.10.2.7.3 of EN.81.2) Yes ☐ No ☐

(e) Confirm that the electrical safety device on the overspeed governor operates correctly Yes ☐ No ☐

7.0 Car & Balancing Weight Safety Gear & Overspeed Protection (continued)

(f) Confirm that the electrical safety device on the overspeed governor prevents the lift from restarting if the governor is not self resetting — N/A ☐ Yes ☐ No ☐

(g) Confirm that the electrical safety device detecting breakage or slack in the overspeed governor safety rope stops the lift — Yes ☐ No ☐

(h) Confirm that the governor, if adjustable, is sealed — N/A ☐ Yes ☐ No ☐

(i) Confirm that the correct rope type is supplied and the rope certificate is available, complete and correct — Specified Make /Type [ ] Yes ☐ No ☐

7.2.2 Tripping by Safety Rope — N/A ☐

(a) Confirm that the correct rope type is supplied and the rope certificate is available, complete and correct — Specified Make /Type [ ] Yes ☐ No ☐

(b) Confirm that the electrical safety device detecting breakage or slack in the safety rope stops the lift — Yes ☐ No ☐

7.3 Balancing Weight Safety Gear — N/A ☐

(a) Confirm that the correct safety gear is supplied — Specified

Progressive : Make /Type [ ] Yes ☐ No ☐

Instantaneous : Make /Type [ ] Yes ☐ No ☐

(b) Confirm that the safety gear has been CE marked — Yes ☐ No ☐

(c) Confirm that the safety gear stops the balancing weight in the downward direction when operated and engaging at the appropriate speed and with the car empty of load:

- at rated speed in the case of instantaneous safety gear (see Annex D.2.i.1 of EN.81-2) — Yes ☐ No ☐

- at rated speed or lower in the case of progressive safety gear (see Annex D.2.i.2 of EN.81-2) — Yes ☐ No ☐

(d) Following the test confirm that no deterioration which could adversely affect the normal use of the lift has occurred and that the safety gear resets upon release (see Annex D.2.i of EN.81-2) — Yes ☐ No ☐

7.0 Car & Balancing Weight Safety Gear & Overspeed Protection (continued)

7.4 Balancing Weight Overspeed Governor

N/A ☐

(a) Confirm that the correct overspeed governor is supplied	Specified Make /Type		Yes	☐	No	☐
(b) Confirm the overspeed governor has been CE marked			Yes	☐	No	☐
(c) Confirm that the overspeed governor is accessible or is able to be remotely tested and reset. (see 9.10.2.7.2 & 9.10.2.7.3 of EN.81.2)			Yes	☐	No	☐
(d) Confirm that the electrical safety device stops the lift at a speed up to 10% greater than the speed of the car			Yes	☐	No	☐
(e) Confirm that the overspeed governor, if adjustable, is sealed		N/A ☐	Yes	☐	No	☐
(f) Confirm that the correct rope type is and the rope certificate is available, complete and correct.	Specified Make /Type		Yes	☐	No	☐

7.5 Pipe Rupture Valve or Restrictor

N/A ☐

(a) Confirm that the correct rupture valve has been fitted (see 1.25)	Yes	☐	No	☐
(b) Confirm that the device has been CE marked	Yes	☐	No	☐
(c) Confirm that the tripping speed is correct according to Annex D.2.r and s of EN.81-2	Yes	☐	No	☐
(d) Confirm that the device has been positioned and fitted correctly	Yes	☐	No	☐
(e) Confirm that if adjustable the rupture valve/restrictor has been sealed	Yes	☐	No	☐

7.0 Car & Balancing Weight Safety Gear & Overspeed Protection (continued)

7.6 Mechanical Anti-creep Device

N/A ☐

(a) **Clamping Device/Safety Gear** (see 9.10.5.2 of EN 81-2) N/A ☐

Confirm that the clamping device stops the car whilst travelling down at rated speed and 125% load uniformly distributed (see Annex D.2.j.1 and 2 of EN 81-2)	Yes ☐	No ☐
Following the test confirm that no deterioration which could adversely affect the normal use of the lift has occurred. (see Annex D.2.j of EN 81-2)	Yes ☐	No ☐
Confirm that the lever actuates the device at each floor level and it engages on its stops properly (see 9.10.5.2.a of EN 81-2) N/A ☐	Yes ☐	No ☐
Confirm that the rope actuates the device (see 9.10.5.1 of EN 81-2) N/A ☐	Yes ☐	No ☐
Confirm that when the car is running the device is fully retracted and it is clear of its stops (see 9.10.5.2.b of EN 81-2)	Yes ☐	No ☐

(b) **Pawl Device** (see 9.11 of EN.81-2) N/A ☐

Confirm that the pawl device stops the car whilst travelling down at rated speed with 125% load uniformly distributed (see Annex D.2.m.1 of EN 81-2)	Yes ☐	No ☐
Following the test confirm that no deterioration which could adversely affect the normal use of the lift has occurred. (see Annex D.2.m.1 of EN 81-2)	Yes ☐	No ☐
Confirm that the pawl device engages on its stops at each landing to support the car (see Annex D.2.m.1 of EN 81-2)	Yes ☐	No ☐
Confirm that the pawl device is properly clear of its supports when the car travels through the lift shaft (see Annex D.2.m.2 of EN 81-2)	Yes ☐	No ☐
Confirm that the buffer stroke is correct for the pawl device (see Annex D.2.m.3 of EN 81-2)	Yes ☐	No ☐

8.0 Hydraulic Equipment

8.1 Jack

Make/Type Specified ☐ Actual ☐

(a) Confirm that the jack has been provided with method of guidance — Yes ☐ No ☐

(b) Confirm that the jack has been correctly supported as near to the top of the cylinder as specified — Yes ☐ No ☐

(c) Confirm that jacks installed in the ground have been provided with protection — N/A ☐ Yes ☐ No ☐

(d) Confirm that pulleys fitted to jacks are fitted with guards (see 9.4 of EN.81-2) — N/A ☐ Yes ☐ No ☐

8.2 Machine

(a) Confirm that if safety gear or clamping device is used a handpump has been provided with a correctly set pressure relief valve. (see 12.9.2 of EN.81.2) — N/A ☐ Yes ☐ No ☐

(b) Confirm that a device to show the position of the lift in the well is fitted in the machine room — Yes ☐ No ☐

(c) Confirm that a pressure gauge has been provided, is easily read and operates correctly — Yes ☐ No ☐

(d) Confirm that the oil reservoir can be easily filled, drained and its level checked — Yes ☐ No ☐

8.3 Pipework

		Specified	Actual
(a) Solid Pipework diameter	N/A ☐		
(b) Flexible Pipework diameter	N/A ☐		
(c) Minimum bend radius			

(d) Confirm that the Flexible pipework has been marked with the test pressure — N/A ☐ Yes ☐ No ☐

9.0 Measurement of the System Parameters

(a) Is the mains current within the limit specified? (See Annex D.2.d of EN.81-2) Specified ____ A Actual ____ A

(b) Measure and record the following operational data when the car is at mid-point of travel. (See Annex D.2.d of EN.81-2)

Car Loading Condition		Rated Speed m/s	* Levelling Speed N/A ☐ m/s	Re-levelling Speed N/A ☐ m/s	Inspection Speed m/s	Emergency Operation Speed N/A ☐ m/s	Docking Operation Speed N/A ☐ m/s
EN.81-2 Clause No.		12.8	14.2.1.2	14.2.1.2	14.2.1.3	12.9.1.2	14.2.1.4
Empty	Up						
	Dn						
w Balanced	Up						
	Dn						
Rated	Up						
	Dn						

* with advance door opening

(c) Confirm that the measured rated speed does not exceed the design rated speed by more than 8% (see 12.8.2 of EN 81-2) Yes ☐ No ☐

(d) Confirm that the maximum levelling deviation is within the manufacturers tolerances Specified ____ Actual ____

9.0 Measurement System Parameters (continued)

(e) Pressure Test

(1) State the full load static pressure (see Annex D.2.p of EN 81-2) MPa

(2) With 200% full load static pressure applied to the system for 5 minutes confirm there is no evidence of pressure drop due to leakage. (see Annex D.2.t of EN 81-2) Yes ☐ No ☐

(3) **Confirm** the pressure relief valve operates at 140% of full load static pressure (see Annex D.2.q of EN 81-2) and that the integrity of the hydraulic system is maintained after the test Yes ☐ No ☐

(4) Where the pressure relief valve has to be set at a value greater than 140% the designer is to confirm this setting Specified % Actual %

(5) **Confirm** that the car does not creep down from the top floor more than 10mm in 10 minutes. (see Annex D.2.u of EN 81-2) Yes ☐ No ☐

(6) **Confirm** the manual lowering automatically stops before the ropes/chains become slack (see Annex D.2.v of EN 81-2) N/A ☐ Yes ☐ No ☐

(7) **Confirm** that the oil temperature overheating protection device functions correctly. (see Annex D.2.x of EN 81-2) Yes ☐ No ☐

10.0 Protective Devices

10.1 Pump Motor Windings

Is motor protection provided (see 13.3 of EN.81-2) Yes ☐ No ☐

10.2 Door Motor Winding

Is motor protection provided (see 13.3 of EN.81-2) N/A ☐ Yes ☐ No ☐

10.3 Motor Run Time Limiter

Confirm that the correct motor run time limiter is installed and operates correctly (see 12.12 of EN.81-2) Yes ☐ No ☐

10.4 Lighting and Socket Outlet Protection

Confirm that the lighting and socket electrical supply is separate to that of the lift machine and that these circuits have there own independent short circuit protection (see 13.6.1 and 13.6.3.3 of EN.81-2 Yes ☐ No ☐

11.0 Electrical Wiring Examination

11.1 Insulation Resistance to Earth

Confirm that the insulation resistance to earth for the electrical system is correct and in accordance 13.1.3 of EN.81-2
(see also Annex D.2.e.1)

Yes ☐ No ☐

11.2 Earthing

Confirm that all metal work is properly earthed back to the lift main earthed isolator. (see Annex D.2.e.2 in EN.81-2)

Yes ☐ No ☐

11.3 Electrical Wiring

(a) Confirm that the electrical wiring, including travelling cables, conform to 13.5 of EN.81-2

Yes ☐ No ☐

(b) Confirm that the wiring installed is in accordance with the manufacturers instructions (see EMC compliance)

Yes ☐ No ☐

(c) Confirm that the controller components are labelled in accordance with the wiring diagram (see 15.10 of EN.81-2)

Yes ☐ No ☐

(d) Confirm that the controller and other electrical equipment are protected against direct contact with enclosures of at least IP2X

Yes ☐ No ☐

12.0 Documentation

(a) Confirm that there is a register as called for in 16.2 of EN.81-2

Yes ☐ No ☐

(b) Confirm that there is an instruction manual as called for in 16.3 of EN.81-2. EN 81-70, EN 81-72 giving also information about normal operation, rescue operation, periodical inspection procedures, etc.

Yes ☐ No ☐

(c) Confirm that where the lift deviates from the Harmonised Standard a design examination certificate has been provided

N/A ☐ Yes ☐ No ☐

(d) Confirm that where the lift is a Model Lift an EC type examination certificate has been provided

N/A ☐ Yes ☐ No ☐

13.0 Confirmation of compliance with the Standard EN.81-2

(a) Are all the items associated with the lift installation, for which the lift manufacturer is not directly responsible, in a suitable state for the installation to be put into service? e.g. access to lift machine room, telephone line, access lighting etc.

Yes ☐ No ☐

NOTE: Some of the items requiring attention may not be part part of the contract for the lift but part of the installation and the responsibility of others.

If No provide details :

(b) Confirm that all the tests and examinations have been carried out successfully to prove compliance with EN.81-2. Where the lift requires additional tests to prove compliance with Notified Body Design Examination Certificates confirm that these have also been completed, the results of which should be attached to these test results.

Yes ☐ No ☐

Where any previous question in this report has led to a answer of “NO” indicate the reasons and further actions necessary to achieve compliance

Note : Before signing this report ensure that every question has been answered

Signature		Name		Position	
Company		Date			

Name and address of the Branch Office making the examination

Note : Completion of this document does not, in itself, constitute authority to place the lift into service

Annex A – Additional Requirements For Unit Verification

The following describes additional tests and verification necessary when validating lift installations in accordance with Annex X of the Lifts Directive 95/16/EC.

A.1 – Documentation and Design

A.1.1 Confirm that calculations for the following are available, complete and correct :-

Loads imposed on the building by the lift components e.g. Guide Brackets, Buffers, Ram, Pawl Device, etc. (see EN81-2 Clause 5.3)		Yes ☐	No ☐
Selection of car guide rail size and distance between supports. (see EN81-2 Clause 10.1 and Annex G)		Yes ☐	No ☐
Jack selection using Pressure, Buckling and Tensile Stress (see EN81-2 Clause 12.2.1 and Annex K)		Yes ☐	No ☐
Sizing of Rigid Pipes (see EN81-2 Clause 12.3.2)	N/A ☐	Yes ☐	No ☐
Selection of Suspension Rope and Terminations (see EN81-2 Clause 9.2.2 & 9.2.3)	N/A ☐	Yes ☐	No ☐
Selection of Suspension Chain and Terminations (see EN81-2 Clause 9.2.5 & 9.2.6)	N/A ☐	Yes ☐	No ☐
Selection of Overspeed Governor Rope / Safety Rope (see EN81-2 Clause 9.10.6)	N/A ☐	Yes ☐	No ☐
The design of the car sling		Yes ☐	No ☐
A.1.2 Confirm that documentation and test results are available and in order for any glass used in the construction of the car or car and landing doors. (see EN81-2 Clause 7.2.3.3, 8.3.2.2, 8.6.7.2 and Annex J)	N/A ☐	Yes ☐	No ☐
A.1.3 Confirm that Certificates of Type Examinations according to annex v(a) or annex ix are available for the installed safety components listed in Annex iv of the Lifts Directive 95/16/EC	N/A ☐	Yes ☐	No ☐
A.1.4 Confirm that where the lift is not in complete conformity with EN81-1 a Risk Assessment has been carried out to show that the equivalent level of safety has been achieved for the new/alternative lift equipment.	N/A ☐	Yes ☐	No ☐
A.1.5 Confirm that the pawl device has been designed in accordance with EN.81-2 Clause 9.11	N/A ☐	Yes ☐	No ☐

A.1 – Documentation and Design (continued)

A.1.7 Confirm that where the safety gear is tripped by suspension failure its design conforms to EN.81-2 Clause 9.10.3) N/A ☐ Yes ☐ No ☐

A.1.8 Confirm that where the safety gear is tripped by a lever its design conforms to EN.81-2 Clause 9.10.5.2) N/A ☐ Yes ☐ No ☐

A.1.9 Confirm that where installed the balance weight safety gear and its means of tripping are compatible and in accordance with EN.81-2 Clause 9.6 N/A ☐ Yes ☐ No ☐

A.1.10 Confirm that where telescopic jacks are used they are designed in accordance with EN.81-2 Clause 12.2.5 N/A ☐ Yes ☐ No ☐

A.11 Confirm that the means of limiting the stroke of the ram has been designed in accordance with EN.81-2 Clause 12.2.3 Yes ☐ No ☐

A.1.12 Confirm that the connection between the ram and the car has been designed in accordance with EN.81-2 Clause 12.2.2 N/A ☐ Yes ☐ No ☐

A.2 Safety Components

A.2.1 Confirm that the following have been selected, in accordance with the contract, so that they provide the level of safety required by the EN.81-2 Harmonised Standard, and that where appropriate they are compatible.

Device for Locking Landing Door (see EN.81-2 Clause 7.7.3) Yes ☐ No ☐

Device to prevent the lift car from falling (safety gear) (see EN.81-2 Clause 9.8) N/A ☐ Yes ☐ No ☐

Overspeed Limitation Device (speed governor) (see EN.81-2 Clause 9.10.2) N/A ☐ Yes ☐ No ☐

Buffers - Energy Accumulation – Non Linear (see EN.81-2 Clause 10.4.1.2) N/A ☐ Yes ☐ No ☐

- Energy Accumulation – Buffered Return (see EN.81-2 Clause 10.4.2) N/A ☐ Yes ☐ No ☐

- Energy Dissipation (see EN.81-2 Clause 10.4.3) N/A ☐ Yes ☐ No ☐

Hydraulic Rupture Valve / Restrictor (see EN.81-2 Clause 12.5.5 and 12.5.6) N/A ☐ Yes ☐ No ☐

Electric Safety Switches containing electronic components (see EN.81-2 Clause 14.1.2.3) N/A ☐ Yes ☐ No ☐

A.2.2 Confirm that all of the relevant safety switches listed in EN.81-2 Clause 14.1.2 and Annex A have been provided and correctly used and identified in accordance with the wiring diagram for the lift Yes ☐ No ☐

A.3 Machine

A.3.1 Confirm that in relation to the up valve, down valve, shut off valve, pressure relief valve, pressure gauge, filters and non return valve the hydraulic control valve is suitable for its intended use. (see EN.81-2 Clause 12.5) Yes ☐ No ☐

A.3.2 Confirm that the machine is fitted with a means of hand lowering the lift car for emergency rescue of trapped passengers and that it is suitable for its intended use. (see EN.81-2 Clause 12.9) Yes ☐ No ☐

A.4 Control Systems

A.4.1 Confirm that the levelling, re-levelling and anti-creeping Operations have been designed and operate in accordance with EN.81-2 Clause 14.2.1.2 and 14.2.1.5 N/A ☐ Yes ☐ No ☐

A.4.2 Confirm that the inspection operations have been designed and operate in accordance with EN.81-2 Clause 14.2.1.3 Yes ☐ No ☐

A.4.3 Confirm that the docking operations have been designed and operate in accordance with EN.81-2 Clause 14.2.1.4 N/A ☐ Yes ☐ No ☐

A.4.4 Confirm that where vertical sliding doors have been used the control system complies with EN.81-2 Clause 7.5.2.2) N/A ☐ Yes ☐ No ☐

A.5 Protective Devices

A.5.1 Confirm that the means of protecting the hydraulic fluid from overheating is suitable for the fluid used and designed in accordance with EN.81-2 Clause 12.14 Yes ☐ No ☐

A.5.2 Confirm that the motor over current protection has been designed in accordance with EN.81-2 Clause 13.3 Yes ☐ No ☐

A.6 Negotiations

A.6.1 Confirm that the supplied lift as described within this test report is in compliance with that described in the agreed technical specification, negotiated between the lift manufacturer and their client. Yes ☐ No ☐

A.7 Details of Examiner

Note : Before signing this report ensure that every question has been answered

Signature		Name		Position	
Company		Date			

Name and address of the Branch Office making the examination	

Note : Completion of this document does not, in itself, constitute authority to place the lift into service

Appendix B1 - Machinery inside the well - Working area in the car or the car roof

Access

Confirm that the door providing access to the working area is according to the requirements listed in clause 6.4.7.1 of EN 81-2/A2). NA ☐ Yes ☐ No ☐

Construction

Confirm that any kind of uncontrolled and unexpected car movement resulting from maintenance/inspection is prevented by a mechanical device (see clause 6.4.3.1 of EN 81-2/A2). Yes ☐ No ☐

Confirm that the active position of the mechanical block is monitored by an electrical safety device according to 14.1.2 (see clause 6.4.3.1 of EN 81-2/A2). Yes ☐ No ☐

Confirm that when the car is blocked, it is possible to leave the working area easily and safely (see clause 6.4.3.1 of EN 81-2/A2). Yes ☐ No ☐

Emergency and test operation

Confirm that the devices and equipment for emergency and tests operations are provided on a panel(s) suitable to carrying out from outside of the well all emergency operations and any necessary dynamic tests of the lift (see clause 6.6.1 of EN 81-2/A2). Yes ☐ No ☐

Confirm that the panel(s) is inaccessible to unauthorised persons (see clause 6.6.1 of EN 81-2/A2). NA ☐ Yes ☐ No ☐

Confirm that if the emergency and tests devices are not protected inside a machinery cabinet, they are enclosed with a suitable cover according to clause 6.6.1 of EN 81-2/A2. NA ☐ Yes ☐ No ☐

Confirm that the panel includes the emergency operation device according to 12.9 and an intercom system according to 14.2.3.4 (see clause 6.6.2 of EN 81-2/A2). NA ☐ Yes ☐ No ☐

Confirm that the devices on the panel are lit by a permanently installed electric lighting with an intensity of at least 50 lux (see clause 6.6.3 of EN 81-2/A2). NA ☐ Yes ☐ No ☐

Confirm that the working area in which is installed the panel(s) is in accordance with 6.3.3.1 of EN 81-2/A2. NA ☐ Yes ☐ No ☐

Emergency operation

Confirm that a manually operated emergency lowering device is provided in the relevant machinery space, allowing the car even in the case of power failure, to be lowered to a level where passengers can leave the car (see clause 12.9.1 of EN 81-2/A2). Yes ☐ No ☐

Confirm that if the car is fitted with a safety gear or a clamping device, a hand-pump causing the car to move in the upward direction, is permanently installed in the relevant machinery space. 12.9.2 of EN 81-2/A2. NA ☐ Yes ☐ No ☐

Confirm that it is possible to check easily whether the car is an unlocking NA ☐ Yes ☐ No ☐

zone, by a means independent from the power supply (see clause 12.9.2of EN 81-2/A2).

Confirm that an intercom system, powered by an emergency supply, is installed between the inside of the car and the place from which the emergency operation is carried out if direct acoustic communication is not possible (see clause 12.9.2of EN 81-2/A2).	NA	☐	Yes	☐	No	☐

Stopping device

Confirm that a stopping device(s) is installed according to the requirements of clause 14.2.2 of EN 81-2/A2.	NA	☐	Yes	☐	No	☐

Instructions

Confirm that the instruction manual gives the necessary information about the normal use of the lift and rescue operation (see clause 16.3.1 of EN 81-2/A2).	NA	☐	Yes	☐	No	☐

Appendix B2 - Machinery in the well - Working area in the pit

Access

Confirm that the door providing access to the working area is according to the requirements listed in clause 6.4.7.1 of EN 81-2/A2).	NA	☐	Yes	☐	No	☐

Construction

Confirm that a device is provided to mechanically stop the car to create a free distance of at least 2 m between the floor of the working area and the lowest part of the car (see clause 6.4.4.1 of EN 81-2/A2).			Yes	☐	No	☐
Confirm that the device to create the free distance is designed according to the points b, c, d, e, f, g, h of the clause 6.4.4.1 of EN 81-2/A2.			Yes	☐	No	☐
Confirm that when the car is in the position according to 6.4.4.1 a), it is possible to leave the working area easily and safely (see clause 6.4.4.2 of EN 81-2/A2).			Yes	☐	No	☐

Emergency and test operation

Confirm that the devices and equipment for emergency and tests operations are provided on a panel(s) suitable to carrying out from outside of the well all emergency operations and any necessary dynamic tests of the lift (see clause 6.6.1 of EN 81-2/A2).			Yes	☐	No	☐
Confirm that the panel(s) is inaccessible to unauthorised persons (see clause 6.6.1 of EN 81-2/A2).	NA	☐	Yes	☐	No	☐
Confirm that if the emergency and tests devices are not protected inside a machinery cabinet, they are enclosed with a suitable cover according to clause 6.6.1 of EN 81-2/A2.	NA	☐	Yes	☐	No	☐
Confirm that the panel includes the emergency operation device according to 12.9 and an intercom system according to 14.2.3.4 (see clause 6.6.2 of EN 81-2/A2).	NA	☐	Yes	☐	No	☐
Confirm that the devices on the panel are lit by a permanently installed electric lighting with an intensity of at least 50 lux (see clause 6.6.3 of EN 81-2/A2).	NA	☐	Yes	☐	No	☐
Confirm that the working area in which is installed the panel(s) is in accordance with 6.3.3.1 of EN 81-2/A2.	NA	☐	Yes	☐	No	☐

Emergency operation

Confirm that a manually operated emergency lowering device is provided in the relevant machinery space, allowing the car even in the case of power failure, to be lowered to a level where passengers can leave the car (see clause 12.9.1 of EN 81-2/A2).			Yes	☐	No	☐
Confirm that if the car is fitted with a safety gear or a clamping device, a hand-pump causing the car to move in the upward direction, is permanently installed in the relevant machinery space. 12.9.2 of EN 81-2/A2.	NA	☐	Yes	☐	No	☐
Confirm that it is possible to check easily whether the car is an unlocking zone, by a means independent from the power supply (see clause 12.9.2of EN 81-2/A2).	NA	☐	Yes	☐	No	☐

Confirm that an intercom system, powered by an emergency supply, is installed between the inside of the car and the place from which the emergency operation is carried out if direct acoustic communication is not possible (see clause 12.9.2of EN 81-2/A2).	NA	☐	Yes	☐	No	☐

Stopping device

Confirm that a stopping device(s) is installed according to the requirements of clause 14.2.2 of EN 81-2/A2.	NA	☐	Yes	☐	No	☐

Instructions

Confirm that the instruction manual gives the necessary information about the normal use of the lift and rescue operation (see clause 16.3.1 of EN 81-2/A2).	NA	☐	Yes	☐	No	☐

Appendix B3 - Machinery in the well - Working area on a platform

Access

Confirm that the door providing access to the working area is according to the requirements listed in clause 6.4.7.1 and 6.4.7.2 of EN 81-2/A2. NA ☐ Yes ☐ No ☐

Construction

Confirm that the platform is permanently installed and retractable if it is in the travel path of the car, the counterweight or the balancing weight (see clause 6.4.5.1 of EN 81-2/A2). NA ☐ Yes ☐ No ☐

Confirm that if the platform is located in the travel path of the car, the counterweight or the balancing weight

- the travel path of the car is limited by movable stops according to the clause 6.4.5.2 of EN 81-2/A2. NA ☐ Yes ☐ No ☐
- The car is kept stationary by using a mechanical device according to 6.4.3.1.a, b. and 6.4.5.2 of EN 81-2/A2. NA ☐ Yes ☐ No ☐

Confirm that the platform has adequate mechanical resistance, is provided with a balustrade in conformity with 8.13.3, and the vertical distance between the lower part of the platform and the level of access does not exceed 0,50 m (see clause 6.4.5.3 of EN 81-2/A2). Yes ☐ No ☐

Confirm that if the platform is located in the travel path of the car a free space of at least

Confirm, in the case of retractable platform, that the fully retracted position is monitored using an electrical safety device (see clause 6.4.5.4 of EN 81-2/A2). NA ☐ Yes ☐ No ☐

Confirm, in the case of retractable platform, that the platform is provided with a manually or power operated device for putting into or removing from the working position, from outside of the well or from the lift pit (see clause 6.4.5.4 of EN 81-2/A2). NA ☐ Yes ☐ No ☐

Confirm that the movable stops automatically operate when the platform is placed in working position (see clause 6.4.5.5 of EN 81-2/A2). NA ☐ Yes ☐ No ☐

Confirm that the movable stops automatically operate when the platform is placed in working position (see clause 6.4.5.5 of EN 81-2/A2). NA ☐ Yes ☐ No ☐

Confirm that the movable stops are provided with buffers in conformity with 10.3 and 10.4 (see clause 6.4.5.5 of EN 81-2/A2). NA ☐ Yes ☐ No ☐

Confirm that the positions of the movable stops are monitored with electrical safety device in accordance with clause 6.4.5.5 b and c of EN 81-2/A2. NA ☐ Yes ☐ No ☐

Confirm that when the movable stops are in the intended position, an additional final limit switch operates before the car, the counterweight or the balancing weight comes into contact with the movable stops (see clause 6.4.5.6 of EN 81-2/A2). NA ☐ Yes ☐ No ☐

Confirm that when it is necessary to move the car from the platform an inspection control station is provided in accordance with 6.4.5.6 of EN 81-2/A2.	NA	☐	Yes	☐	No	☐
Emergency and test operation						
Confirm that the devices and equipment for emergency and tests operations are provided on a panel(s) suitable to carrying out from outside of the well all emergency operations and any necessary dynamic tests of the lift (see clause 6.6.1 of EN 81-2/A2).			Yes	☐	No	☐
Confirm that the panel(s) is inaccessible to unauthorised persons (see clause 6.6.1 of EN 81-2/A2).	NA	☐	Yes	☐	No	☐
Confirm that if the emergency and tests devices are not protected inside a machinery cabinet, they are enclosed with a suitable cover according to clause 6.6.1 of EN 81-2/A2.	NA	☐	Yes	☐	No	☐
Confirm that the panel includes the emergency operation device according to 12.9 and an intercom system according to 14.2.3.4 (see clause 6.6.2 of EN 81-2/A2).	NA	☐	Yes	☐	No	☐
Confirm that the devices on the panel are lit by a permanently installed electric lighting with an intensity of at least 50 lux (see clause 6.6.3 of EN 81-2/A2).	NA	☐	Yes	☐	No	☐
Confirm that the working area in which is installed the panel(s) is in accordance with 6.3.3.1 of EN 81-2/A2.	NA	☐	Yes	☐	No	☐
Emergency operation						
Confirm that a manually operated emergency lowering device is provided in the relevant machinery space, allowing the car even in the case of power failure, to be lowered to a level where passengers can leave the car (see clause 12.9.1 of EN 81-2/A2).			Yes	☐	No	☐
Confirm that if the car is fitted with a safety gear or a clamping device, a hand-pump causing the car to move in the upward direction, is permanently installed in the relevant machinery space. 12.9.2 of EN 81-2/A2.	NA	☐	Yes	☐	No	☐
Confirm that it is possible to check easily whether the car is an unlocking zone, by a means independent from the power supply (see clause 12.9.2of EN 81-2/A2).	NA	☐	Yes	☐	No	☐
Confirm that an intercom system, powered by an emergency supply, is installed between the inside of the car and the place from which the emergency operation is carried out if direct acoustic communication is not possible (see clause 12.9.2of EN 81-2/A2).	NA	☐	Yes	☐	No	☐
Stopping device						
Confirm that a stopping device(s) is installed according to the requirements of clause 14.2.2 of EN 81-2/A2.	NA	☐	Yes	☐	No	☐
Instructions						
Confirm that the instruction manual gives the necessary information about the normal use of the lift and rescue operation (see clause 16.3.1 of EN 81-2/A2).	NA	☐	Yes	☐	No	☐

Appendix B4 – Machinery inside the well - Working area outside the well

Access

Confirm that the access to the machinery is possible only by a door/trap in conformity with clause 6.4.7.2 of EN 81-2/A2.	Yes ☐	No ☐
Confirm that when the door/trap is open, protection means are provided to prevent the access of unauthorised persons into dangerous area (see clause 6.4.7.2 of EN 81-2/A2).	Yes ☐	No ☐
Confirm that the passage ways are not obstructed by the open door/trap and the protection means are in accordance with national building legislation (0.3.17 of EN 81-2/A2).	Yes ☐	No ☐

Instructions

Confirm that the instruction manual gives the necessary information about the normal use of the lift and rescue operation (see clause 16.3.1 of EN 81-2/A2 and relevant NBL Recommendations).	Yes ☐	No ☐

Appendix B5 - Machinery outside of the well (and not located in a separate machine room)

General provisions

Confirm that the machinery spaces outside the well are so constructed to withstand the loads and the forces to which they are intended to be subjected (see clause 6.5.1 of EN 81-2/A2). Yes ☐ No ☐

Construction

Confirm that the machinery is located inside a cabinet (see clause 6.5.2.2 of EN 81-1/A2). Yes ☐ No ☐

Confirm that the cabinet consists of imperforate walls, floor, roof and door(s) (see clause 6.5.2.2 of EN 81-2/A2). Yes ☐ No ☐

Confirm that the door(s) have sufficient dimensions, do not open towards the inside of the cabinet and are provided with a key-operated lock, capable of being reclosed and relocked without a key (see clause 6.5.2.3 of EN 81-2/A2). Yes ☐ No ☐

Confirm that working area in front of the machinery cabinet complies with the requirements according to 6.4.2 and 6.4.6 of EN 81-2/A2. Yes ☐ No ☐

Confirm that the machinery cabinet is suitably ventilated and protected as far as it is reasonably practicable from dust, harmful fumes and humidity (see clause 6.5.4 of EN 81-2/A2). Yes ☐ No ☐

Confirm that inside the machinery cabinet is permanently installed an electric lighting with an intensity of at least 200 lux at floor level (see clause 6.5.5 of EN 81-2/A2). Yes ☐ No ☐

Confirm that the light is controlled by a switch placed inside the cabinet, close to the door(s) at an appropriate height (see clause 6.5.5 of EN 81-2/A2). Yes ☐ No ☐

Confirm that at least one socket outlet is provided (see clause 6.5.5 of EN 81-2/A2). Yes ☐ No ☐

Confirm that the passage ways are not obstructed by the open door/trap and the protection means in accordance with building national legislation (0.3.19 of EN 81-2/A2). Yes ☐ No ☐

Lift machine

Confirm that a shut-off valve is installed close to the other valves on the lift machine (see clause 12.5.1 of EN 81-2/A2. NA ☐ Yes ☐ No ☐

Instructions

Confirm that the instruction manual gives the necessary information about the normal use of the lift and rescue operation (see clause 16.3.1 of EN 81-1/A2). Yes ☐ No ☐

Emergency operation

Confirm that a manually operated emergency lowering device is provided in the relevant machinery space, allowing the car even in the case of power failure, to be lowered to a level where passengers can leave the car (see clause 12.9.1 of EN 81-2/A2).			Yes	☐	No	☐
Confirm that if the car is fitted with a safety gear or a clamping device, a hand-pump causing the car to move in the upward direction, is permanently installed in the relevant machinery space. 12.9.2 of EN 81-2/A2.	NA	☐	Yes	☐	No	☐
Confirm that it is possible to check easily whether the car is an unlocking zone, by a means independent from the power supply (see clause 12.9.3 of EN 81-2/A2).			Yes	☐	No	☐

Instructions

Confirm that the instruction manual gives the necessary information about the normal use of the lift and rescue operation (see clause 16.3.1 of EN 81-2/A2).	NA	☐	Yes	☐	No	☐

Appendix B6 : specific checks with respect to EN 81-2 + A3 (applicable to all hydraulic lifts)

FIXING SYSTEMS

Confirm that the fixing systems of safety guards, which have to be removed during regular maintenance and inspection remain attached to the guard or to the equipment when the guard is removed (0.3.21) ---------- NA☐ Yes☐ No☐

SCOPE

Confirm that the lifting speed is > 0,15 m/s, otherwise this checklist is not applicable and the appliance shall be assessed to the Machinery directive 2006/42/EC (1.3) ----- NA☐ Yes☐ No☐

UNINTENDED CAR MOVEMENT

Confirm that a means to prevent unintended car movement with the open / unlocked door is applied in conformity with the principles according to 9.13.1 --- NA☐ Yes☐ No☐

Confirm that the basic characteristics and the references of the type examination certificate of the means to prevent unintended car movement are laid down in the lift book (9.13.13, 16.2) ---------- NA☐ Yes☐ No☐

Confirm that the means to prevent unintended car movement is independent from functional components, unless there is built-in redundancy and self-monitoring (9.13.3) ------ NA☐ Yes☐ No☐

Confirm that the self monitoring was subject to the type-examination (9.13.3) ---------- NA☐ Yes☐ No☐

Confirm, in case of using two electrically commanded hydraulic valves operating in series, that self monitoring consists of verification of correct opening or closing of each single valve (empty car) If a failure is detected, the next normal start of the lift shall be prevented. (9.13.3) ---------- NA☐ Yes☐ No☐

Confirm that self monitoring is functioning correctly and requires manual reset (D.2zc) - NA☐ Yes☐ No☐

Confirm that the stopping element of the means acts either on (9.13.4):

- the car, or ---------- NA☐ Yes☐ No☐
- the rope system (suspension), or ---------- NA☐ Yes☐ No☐
- on the hydraulic system (including the motor/pump in up direction) ---------- NA☐ Yes☐ No☐

Confirm that the means shall stop the car as defined in the type examination certificate upward empty, downward with 100% rated load) in a distance: (9.13.5, D.2zc)

- any direction: maximum 1200 mm from the landing ---------- NA☐ Yes☐ No☐
- downward: distance landing sill to the car door lintel minimum 1000 mm ---------- NA☐ Yes☐ No☐
- upward: distance car sill to the landing door lintel minimum 1000 mm ---------- NA☐ Yes☐ No☐
- upward: distance landing sill to car apron maximum 200 mm ---------- NA☐ Yes☐ No☐

if necessary (depending on the working principle) repeat the test at each landing --------- NA☐ Yes☐ No☐
Remark: Check on retardation of the car is no subject for the final inspection tests)

Confirm that the stopping means operates a safety device, when engaged, which will require manual reset (9.13.8, D.2zc, A). Minimum SIL 1 ---------- NA☐ Yes☐ No☐

Confirm that unintended movement is detected at the latest when the car leaves the unlocking zone (9.13.7) ---------- NA☐ Yes☐ No☐

Confirm that the device for detection of unintended car movement is either: (9.13.7)

a safety contact (14.1.2.2), or ---------- NA☐ Yes☐ No☐

a safety circuit (14.1.2.3), or ---------- NA☐ Yes☐ No☐

PESSRAL (14.1.2.6, A). Minimum SIL 2 ---------- NA☐ Yes☐ No☐

Confirm that release of the stopping means does not require access to the car or the balancing weight (9.13.10) ---------- NA☐ Yes☐ No☐

Confirm that after release of the means it shall be in a condition to operate (9.13.11) ---- NA☐ Yes☐ No☐

Confirm that absence of energy to operate the means will stop the lift (9.13.12) ---------- NA☐ Yes☐ No☐

STOPPING AND LEVELLING ACCURACY OF THE CAR

Confirm that the stopping accuracy is within 10 mm of the landing sill (12.15, D.2zb) --- NA☐ Yes☐ No☐

Confirm that the levelling accuracy is within 20 mm of the landing sill during loading and unloading conditions at most unfavourable floor (12.15, D.2zb) ---------- NA☐ Yes☐ No☐

REMARKS

APPENDIX C EN 81-70 – ACCESSIBILITY TO LIFTS

Within this checklist there are certain requirements relating to audible signals, it is not generally expected that a decibel reading will be necessary to confirm compliance. If however such a reading is necessary then, in accordance with clause 6 Table 3, the reading shall be taken 1m from the source of the sound.

Within this checklist there is reference to the negotiations between the owner and the lift installer, the tester must be aware of all such Negotiations to enable a correct response to these items.

Access to lift car

Confirm by measurement that the door providing access to the lift car is according to the requirements listed in clause 5.2.1 of EN 81-70.(*Type 1- 800mm, type 2-900mm and type 3-1100mm)*			Yes	☐	No	☐
Confirm, that all eligible floors to the lift are clear of any obstacles preventing free access in accordance with clause 5.2.2. (*See Negotiations*)			Yes	☐	No	☐
Confirm that the door dwell time is between 2 to 20 seconds in accordance with clause 5.2.3 EN 81-70			Yes	☐	No	☐
Confirm that the closing door protection is full height between 25mm and 1800mm (see clause 5.2.4 of EN 81-70)			Yes	☐	No	☐
Confirm that any decorative finish on the car walls is less than 15mm (see clause 5.3.11 of EN 81-70).	NA	☐	Yes	☐	No	☐
Confirm that the lift car dimensions are in accordance with clause 5.3.1.1 of EN81-70. *(Type 1- 450 kg : 1000x1250mm; type 2 – 630kg:1100x1400mm; type 3- 1275kg : 2000x1400mm)* (*See Negotiations*)			Yes	☐	No	☐
Confirm that a handrail is fitted to at least one wall of the lift car and has dimensions of x-section 30 x 45mm and top edge 900mm +/- 25mm from car floor. The handrail to be at least 35 mm from car wall (see clause 5.3.2.1 of EN 81-70).			Yes	☐	No	☐
Confirm that (where required by negotiation) a tip up seat is provided 500mm from the lift car floor (+/- 20mm). Depth of seat to be 300-400mm, Width 400-500mm and capable of supporting a load of 100kg.	NA	☐	Yes	☐	No	☐
Confirm that wall mirrors are provided for Type 1 or Type 2 lifts in accordance with clause 5.3.2.3 and are a minimum of 300mm from floor level where car wall are reflective	NA	☐	Yes	☐	No	☐
Confirm that stopping accuracy is +/- 10mm and levelling accuracy within +/- 20mm.			Yes	☐	No	☐

TABLE 2

Confirm that the active part of control buttons are a minimum area of 490mm^2	Yes	☐	No	☐
Confirm that the minimum dimension of the active part of buttons is an inscribed circle of 20mm	Yes	☐	No	☐
Confirm that the active parts of buttons are visually and by touch different from the faceplate and surrounds.	Yes	☐	No	☐
Confirm that the faceplate is a contrast colour to its surrounds	Yes	☐	No	☐
Confirm that the force required to operate a button is between 2,5 to 5N	Yes	☐	No	☐
Confirm that there is an audible feedback to confirm button has been pushed	Yes	☐	No	☐
Confirm that there is visible and audible (adjustable between 35 and 65 db(A)) registration feedback, audible signal on all subsequent operations.	Yes	☐	No	☐
Confirm that exit floor button protrudes greater than 5mm +/- 1mm Note! Preferably green	Yes	☐	No	☐
Confirm that symbols on buttons are on the active part or within 10-15mm to the left of the button	Yes	☐	No	☐
Confirm that symbols are in relief by a minimum of 0.8mm, contrasted to the background and 15-40mm high	Yes	☐	No	☐
Confirm that active parts of buttons are a minimum of 10mm apart.	Yes	☐	No	☐
Confirm that the instruction manual gives the necessary information about the normal use of the lift and rescue operation (see clause 16.3.1 of EN 81-1/A2).	Yes	☐	No	☐
Confirm that distance between groups of buttons(e.g. between alarm/door buttons and call buttons are a minimum of 2 x the distance between the active parts of buttons) (not applicable to landing buttons)	Yes	☐	No	☐
Confirm that minimum height from floor to centreline of any button is 900mm	Yes	☐	No	☐
Confirm that maximum height to centreline of highest button is : Landing-1100mm and car- 1200mm (preferably 1100)	Yes	☐	No	☐
Confirm that the arrangement of landing buttons is vertical	Yes	☐	No	☐
Confirm that the arrangement of car buttons is: Centreline of alarm and car door buttons with a centreline minimum 900mm above floor level- call buttons placed above the alarm and door buttons and for single horizontal row from left to right – for single vertical row from bottom to top and for multiple vertical rows from left to right and then from bottom to top.	Yes	☐	No	☐
Confirm that centreline of any landing buttons is > 500mm from any corner of adjacent walls. *(reveal limited to 250 mm depth, see also CEN Interpretation)*	Yes	☐	No	☐

Confirm that centreline of any car buttons is > 400mm from any corner of adjacent walls			Yes	☐	No	☐
KEYPADS (ANNEX F)	NA	☐	Yes	☐	No	☐
Confirm that distance between buttons is 10 to 15mm or 5 to 15mm for inclined pads			Yes	☐	No	☐
Confirm that buttons have perceivable movement or audible feedback between 35 and 65 dB(A) and visible signal to indicate registration. Audible signal to be repeated each time button is pressed/			Yes	☐	No	☐
Confirm that floor numbers on buttons are between 15 and 40 mm and are contrasted to the background			Yes	☐	No	☐
Confirm that the number 5 has a single tactile dot			Yes	☐	No	☐
Confirm that numbers and symbols are on active part of the button			Yes	☐	No	☐
Confirm that keypads in the car have buttons clearly distinguished from other buttons in the car and the exit floor button is green and protrudes 5 mm +/- 1 mm above other buttons. (It may be marked with a relief star)			Yes	☐	No	☐
CONTROL DEVICES AND SIGNALS						
Landing Control Devices						
Confirm that where temporary activation control is provided, the activation device is marked with the international symbol for provision for the disabled (number 0100 from ISO 7000:1989) (see negotiation)	NA	☐	Yes	☐	No	☐
Confirm that control device is adjacent to landing doors for single lift; one per face for groups where lifts are opposite to each other and one between two lifts for maximum of 4 adjacent lifts	NA	☐	Yes	☐	No	☐
Car Control Devices						
Confirm that buttons are identified -2, -1, 0, 1, 2….etc for floors Alarm button is yellow with bell shape Door re-open by <|> Door close by >|< (clause 5.4.1)			Yes	☐	No	☐
Confirm that the car controls are located: On Right Hand Side when entering for centre opening doors On closing side when entering for side opening doors For type 3 lifts with two entrances either of above options. .			Yes	☐	No	☐
Confirm that in the case of lifts with Destination Control System, if the user has selected “temporary activation” when provided, the door closing is initiated by the door close button; if the car is not used it returns to normal operation after 30 s to 60 s.	NA	☐	Yes	☐	No	☐
Landing Signals						
Confirm that for push button systems an audible signal is made when doors start opening (if door operation exceeds 45 dB(A) this may be unnecessary).	NA	☐	Yes	☐	No	☐
Confirm for collective control that illuminated indicator arrows, at least 40	NA	☐	Yes	☐	No	☐

mm high, positioned above or near doors 1.8 to 2.5 m from floor level indicate direction of travel. Indicators have an angle of view of 140^0.
An audible signal with the arrows one sound for up and two for down, sounds for up and down are different .
(for a single lift if similar signals in the car are visible and audible from landing then no landing devices are necessary)

Destination Control System (where fitted) NA ☐

Confirm that :
a) Confirmation of selected floor is by audible and visible signal. Visible signal is near the input device
b) 40 mm high letters contrasted to their surround above each landing door identify each lift.
c) Lift allocation by visible and audible signal visual signal is near input device
d) Visible and audible signals identify the lift.
e) Users are informed visually and audibly they are entering the allocated car.

Yes ☐ No ☐

Confirm that audible signals are adjustable between 35 and 63 dB(A)

Yes ☐ No ☐

Car Signals

Confirm that there is a position signal in the car operating panel or above it at a height between 1.6 and 1.8m above floor level. Floor numbers are between 30 and 60 mm. A second indicator may be provided, if this is at high level then the one in or above the car panel may be at less than 1.6 m

Yes ☐ No ☐

Confirm that when the car stops at floor level a voice announces the floor in one of the official local languages. Sound level adjustable between 35 and 65dB(A).

Yes ☐ No ☐

Confirm that there is an emergency alarm device meeting requirements of EN81: Part 28 plus
a) Visible and audible signals
b) Yellow illuminated pictogram to indicate alarm given
c) Green illuminated pictogram to indicate alarm has registered
d) Devices such as induction loop for impaired hearing if required.
e) voice link sound level adjustable between 35 and 65 dB(A)

Yes ☐ No ☐

APPENDIX D EN 81-72 – FIREFIGHTING LIFTS

Within the harmonized Standard there are certain requirements relating to the building into which the Fire fighting Lift is installed. It is not generally expected that the person conducting the test will test or examine the following but he may require confirmation that they have been considered by the persons responsible for the construction.

1.2 This Standard is not applicable to dual entry lifts where the fire fighters lobbies are not located at the same side as that of the fire service access level.
0.1 The fire protected lobby and lift well are designed to restrict the ingress of smoke.
0.2 The building design limits the flow of water into the lift well
0.3 Fire fighters lifts are not escape routes
0.4 A Fire fighters lift accesses at each level to a fire protected lobby
0.5 The EN81 – 72 does not prescribe requirements for the fire resisting structure of the building.

FUNDAMENTAL REQUIREMENTS						
Confirm lift serves every floor in the building (clause 5.2.2)			Yes	☐	No	☐
Confirm, car dimensions are according to ISO4190-1 but not < 1100 x 1400mm			Yes	☐	No	☐
Confirm rated load is ≥ 630kg			Yes	☐	No	☐
Confirm entrance width ≥ 800 mm			Yes	☐	No	☐
Confirm when dual entry car and/or used for evacuation car dimensions at least 1100 x 2100mm.	Width mm		Depth mm			
Confirm when dual entry car and/or used for evacuation rated load ≥ 1000kg	NA	☐	Yes	☐	No	☐
Confirm that time to reach furthest floor from access level is ≥ 60 s			Yes	☐	No	☐

FIRE COMPARTMENTS						
LIFTWELL						
Confirm all electrical equipment within 1 m of wall containing landing doors is protected against dripping and splashing water.			Yes	☐	No	☐
Confirm all electrical equipment < 1.0m above pit floor is protected to IP67	NA	☐	Yes	☐	No	☐
Confirm Socket outlet and lowest lamp in pit is ⩾ 0.5m above highest permissible water level			Yes	☐	No	☐
Confirm equipment in machinery spaces located outside of well are protected from malfunction caused by water	NA	☐	Yes	☐	No	☐
Confirm means exist to ensure that highest water level in pit is ≤ fully compressed car buffer			Yes	☐	No	☐
Confirm means exist to prevent water level in pit reaching equipment which would create a malfunction of the lift.	NA	☐	Yes	☐	No	☐

RESCUE OF TRAPPED FIRE FIGHTERS IN THE LIFT CAR						
Confirm that an emergency trapdoor in car roof is provided with dimensions ⩾ 0.5m x 0.7m (0.4m x 0.5m if rated load 630kg)			Yes	☐	No	☐
Confirm no tools are required to remove any suspended ceiling to give access to the lift car from the car roof.	NA	☐	Yes	☐	No	☐
RESCUE OF TRAPPED FIRE FIGHTERS FROM OUTSIDE THE CAR (responsibility of local authorities)						
Confirm Fixed ladders are positioned within 0.75m of landing sill. (Ladders to conform to EN 81: Parts 1-2) - Clause 5.4.3 of EN81: Part 72 describes other means of rescue.	NA	☐	Yes	☐	No	☐
SELF RESCUE FORM INSIDE THE LIFT CAR						
Confirm that maximum step rise to reach trap door is 0.4m and distance from stepping point to a vertical wall is ⩾ 0.1m			Yes	☐	No	☐
Confirm that each step point appears capable of of supporting a load of 1200N			Yes	☐	No	☐
Confirm that the ladder and trap door dimensions and position is such that a firefighter can pass through.			Yes	☐	No	☐
Confirm that a diagram or symbol at each landing indicates how the landing door may be unlocked.			Yes	☐	No	☐
LADDER USED TO GAIN ACCESS TO LANDING DOOR FROM CAR ROOF						
Confirm that ladder is fixed to car, that it does not introduce tripping hazard when stored , that a safety switch monitors removal of ladder preventing movement of the lift car and ladder is of sufficient length to reach landing above when car is level with a landing.			Yes	☐	No	☐

LOBBY						
Confirm that each landing entrance has a fire protected lobby			Yes	☐	No	☐
Confirm that electrical equipment in the lobby can continue to function for 2 hours at a temperature range of 0 to 65^0 C and equipment not in the lobby can operate at a temperature range between 0 and 40^0 C			Yes	☐	No	☐
Confirm that lift control will function correctly in smoke filled lift well and machine rooms for a minimum of 2 hours.			Yes	☐	No	☐
Confirm that where a dual entry lift car is used any landing entrance not intended for fire fighters use shall not exceed 65^0 C	NA	☐	Yes	☐	No	☐
Confirm that the source of the secondary power supply is located in a fire protected area.			Yes	☐	No	☐
Confirm that the primary and secondary power supplies are separated from each other and other power supplies.			Yes	☐	No	☐
CAR AND LANDING DOORS						
Confirm that horizontal car and landing doors are automatic and coupled			Yes	☐	No	☐
LIFT MACHINE AND ASSOCIATED EQUIPMENT						
Confirm that any compartment containing lift equipment has equivalent protection to the lift well			Yes	☐	No	☐
Confirm that any connection of cables, hydraulic pipes between fire compartments shall have equivalent protection to the fire compartments			Yes	☐	No	☐
CONTROL SYSTEM						
Confirm that the fire fighters lift switch is within 2m of the landing entrance, between 1.8m and 2.1m above landing level and is identified by suitable pictogram.			Yes	☐	No	☐
Confirm that operation of the switch is by emergency unlocking triangle and switch position marked I for fire fighters service and O for normal operation.			Yes	☐	No	☐
Confirm that external fire control input only allows fire fighters lift to return to fire service access level and stay with doors open full fire fighters service requires operation of the fire fighters lift switch.			Yes	☐	No	☐
Confirm that fire fighters lift switch does not override inspection control, emergency stop switches or emergency electrical operation.	NA	☐	Yes	☐	No	☐
Confirm that all lift safety devices remain operational with exception of door reversal devices when fire fighters switch is operated.			Yes	☐	No	☐
Confirm that malfunction of any electrical control system outside the lift well does not cause malfunction of the fire fighters lift. (This includes faults in common group control systems between lifts)			Yes	☐	No	☐
Confirm that an audible alarm sounds if door dwell time exceeds 2 minutes after which time the doors will close at reduced power.			Yes	☐	No	☐

PHASE 1: PRIORITY RECALL operate fire fighters switch and confirm the following.						
All landing and car call buttons inoperative and existing calls cancelled			Yes	☐	No	☐
Door open and emergency alarm button to remain operative			Yes	☐	No	☐
Door reversal devices, which may be affected by heat or smoke, to be inoperative.			Yes	☐	No	☐
Lift functions independently of all other lifts in a group.			Yes	☐	No	☐
Lift remains at fire service access level with doors open.			Yes	☐	No	☐
Communication device described in clause 5.12 remains operational			Yes	☐	No	☐
If lift is on inspection control an audible signal sounds until inspection control is returned to Normal.			Yes	☐	No	☐
If Fire fighters lift is travelling away from the fire service access level it shall stop at nearest possible floor, doors remain closed then returns to fire service access floor.			Yes	☐	No	☐
Well and Machine room lighting to be automatically illuminated when fire fighters service initiated.			Yes	☐	No	☐
PHASE 2: USE OF THE LIFT UNDER FIRE FIGHTERS CONTROL						
Car Control Devices to confirm the following:						
Where PHASE 1 has been initiated by an external signal the lift will not operate until fire fighters lift switch has been operated.			Yes	☐	No	☐
Only one car call may be selected simultaneously			Yes	☐	No	☐
.						
It is possible to register another call in the car whilst lift is in motion, this cancels previous call and car travels to new registered floor as quickly as possible.			Yes	☐	No	☐
Registration of car call causes lift to travel to selected floor and remain there with doors closed						
When car is stationary at a landing pressure on the door open button to cause doors to open, release of pressure causes doors to reclose. When fully open doors remain open until next call selected.			Yes	☐	No	☐
Car door reversal devices and door open buttons to remain operative except those which may be affected by heat or smoke			Yes	☐	No	☐

If fire fighters lift service switch is operated from I to O for 5 seconds then returned to I the lift shall return to the fire access level.			Yes	☐	No	☐
If a fire fighters car key switch is fitted then it is marked I and O and key is removable in O position only. If fire service access level switch is set for firefighting mode then the car key switch must be set to I to allow car movement. If the car key switch is set at O position movement of the car is prevented and doors will remain open if lift is not at fire service access level.	NA	☐	Yes	☐	No	☐
Registered car call displayed visually on car control panel			Yes	☐	No	☐
Position of the car to be visually diplayed at fire service access level and in car under both normal and emergency power supply conditions			Yes	☐	No	☐
Lift will not move until call is registered in car			Yes	☐	No	☐
Fire service communication remains operative during PHASE 2			Yes	☐	No	☐
Lift returns to fire service access level when fire fighters switches are returned to normal position before going into normal service.			Yes	☐	No	☐
DUAL ENTRY LIFT CAR	NA	☐				
When the protected fire lobbies are all the same side as the Fire Service access level then confirm the following:						
Two control panels provided at front and rear of lift car one for Normal use and one fire fighters control at the side of the fire protected lobbies marked with a pictogram.			Yes	☐	No	☐
Confirm Normal car control panel inoperative when PHASE I selected except for door open and alarm buttons.			Yes	☐	No	☐
Confirm fire fighters control panel operative from start of PHASE 2.			Yes	☐	No	☐
Confirm landing doors not intended for fire fighters use remain closed			Yes	☐	No	☐
Confirm landing doors to fire protected lobbies are brought into operation			Yes	☐	No	☐
POWER SUPPLIES						
Confirm primary and secondary supplies fire protected to same level as lift well equipment.			Yes	☐	No	☐
Confirm secondary supplies adequate to run lift at rated speed and reach furthest floor from fire service access level within 60 seconds			Yes	☐	No	☐
Confirm that lift will not perform a correction run whilst on PHASE 2 and the power supply is re-established after a power failure.			Yes	☐	No	☐

Confirm that when the power supply is re-established the lift is available for service, if the lift needs to move to establish its position it moves no more than two floors towards the fire service access level.			Yes	☐	No	☐
CAR AND LANDING CONTROLS						
Confirm that whist on PHASE 2 control, operation of the fire fighters lift is by a full set of push buttons in the lift car. Controls and indicators to be protected to at least IPX3.			Yes	☐	No	☐
Confirm that the car button for the fire service access level is suitably marked with a pictogram (Annex F) located either on or adjacent to the button			Yes	☐	No	☐
FIRE SERVICE COMMUNICATION SYSTEM						
Confirm the fire fighters lift has an intercom system or similar device for interactive 2 way speech communication whilst the lift is in PHASES 1 and 2 between the fire fighters lift car and; a) the fire service access level and b) the fire fighters machine room, or in the case of machine room less lifts at the landing mounted control panel. Where a machine room is provided the microphone must only be active when a control button is pressed on its unit			Yes	☐	No	☐
Confirm that the communication system within the car and at the fire service access level is hands free and not a telephone handset.			Yes	☐	No	☐
Confirm the wiring for the communication system is within the lift well.			Yes	☐	No	☐
INSTRUCTIONS						
Confirm that the instruction manual gives the necessary information about the fire fighting lift (see clause 7 EN81:72: 2003)			Yes	☐	No	☐

APPENDIX E – EN 81-21:2009

This check-list specifies the tests and verification to be carried out on new passenger or good/passenger lifts, permanently installed in existing buildings, where in some circumstances due to limitation enforced by building constraints, some requirements of EN 81-2 cannot be met.

According to section 2.2 of Annex I to the Lifts Directive, the application of alternative measures to prevent the risk of crushing above or underneath the lift car is restricted to installations where the requirement for free space or refuge is impossible to fulfil and may be subject to prior approval by national authorities.

2.0 Machine and Pulley Spaces

The following verification shall be carried out both in the machinery room and in the pulley spaces.

2.3 Dimensions

Confirm that, in case the height of the machine room is less than 2,0, an adequate warning is appropriately placed and soft material is provided under the ceiling above those areas (5.9 of EN 81-21)			Yes	☐	No	☐
Confirm the height of the machine room is not less 1,80m in working areas (5.9 of EN 81-21)			Yes	☐	No	☐

2.4 Access

Confirm that the access doors has a minimum width of 0,80m and a minimum height of 1,70m (5.10 of EN 81-21)			Yes	☐	No	☐
Confirm, in case the height of the door is less than 1,80, a suitable warning is placed on both side of the door (5.10 of EN 81-21)			Yes	☐	No	☐

2.10 Doors/Trap Doors

Confirm that the access trap doors for persons have a clear passage of at least 0,60m x 080m (5.11 of EN 81-21)			Yes	☐	No	☐
Confirm, in case one of the dimension is less than 0,80 m, a suitable warning is placed on both side of the door (5.11 of EN 81-21)			Yes	☐	No	☐

3.0 The Well

3.1 a) Reduced top clearance			Yes	☐	No	☐
The lift is equipped with movable stops, or	N/A	☐	Yes	☐	No	☐
The lift is equipped with a pre-triggered stopping system	N/A	☐	Yes	☐	No	☐
3.1 b) Operation						
The lift is equipped with automatically operated movable stops/triggering devices, or	N/A	☐	Yes	☐		
The lift is equipped with manually operated movable stops/ triggering devices	N/A	☐	Yes	☐		
Confirm that the automatically operated movable stops/triggering devices operate in case of power failure (5.5.2.4.1 of EN 81-21)	N/A	☐	Yes	☐	No	☐
Confirm that, in case of power failure, and manually operated movable stops/triggering devices, a mechanical safety device maintains the car stationary (5.5.2.4.1 of EN 81-21)	N/A	☐	Yes	☐	No	☐
Confirm that, in traction drive lifts, the mechanical safety device is operated by the safety system designed according to 5.5.3 of EN 81-21 (5.5.2.4.2 of EN 81-21)	N/A	☐	Yes	☐	No	☐
Confirm that a signal visible and/or audible informs about the position of the movable stops/triggering devices (5.5.4 of EN 81-21)			Yes	☐	No	☐
3.1 c) Movable stops						
Confirm that the movable stop in installed outside the car projection and operate on the jack	N/A	☐	Yes	☐	No	☐

3.0 The Well (continued)

3.1 d) Pre-triggered stopping system

Confirm that the pre-triggered stopping system operates properly (5.5.2.2 of EN 81-21)	N/A	☐	Yes	☐	No	☐
Confirm that the pre-triggered stopping system is type tested in compliance with EN 81-21 Annex C (5.5.2.2 of EN 81-21)	N/A	☐	Yes	☐	No	☐

3.1 e) Top clearance

Confirm that, when the buffering parts of the movable stops are fully compressed or when the car is stopped by the pre-triggered stopping system, the following condition are satisfied at the same time (5.5.2.3 of EN 81-21) :

(ii) The dimension from the standing area on the car roof to the lowest part of the ceiling of the well above this area is at least (1.2 m + 0,035V^2;	Yes	☐	No	☐
(iii) The free vertical distance between the lowest part of the ceiling of the well and the highest item of equipment on the car roof (excluding (iv) below) is at least 0.3 m + 0,035V^2	Yes	☐	No	☐
(iv) The free vertical distance between the lowest part of the ceiling of the well and the highest part of the guide shoes/rollers, rope attachments/header or parts of vertically sliding doors should be at least 0.1 m + 0,035V^2	Yes	☐	No	☐
The free vertical distance between the lowest part of the ceiling of the well and the highest parts of the balustrade or extended balustrade item of equipment is at least 0.3 m + 0,035V^2	Yes	☐	No	☐

Note : The value 0,035V^2 shall only be taken into account for traction lifts with movable stops

3.1 f) car roof balustrade

Confirm that the lift is equipped with an extendable balustrade complying with EN 81-21:2009 – clause 5.6.2 a) b) c)			Yes	☐	No	☐
Confirm that the position of the balustrade is monitored by an electric safety switch (5.6.2 d) of EN 81-21)			Yes	☐	No	☐
Confirm that, in case of emergency electrical operation, the upward travel of the car is limited by a direction dependant switch complying with EN 81-1:1998 clause 14.1.2 (5.6.2 e) of EN 81-21)	N/A	☐	Yes	☐	No	☐
Confirm that the warning required in 7.2.2 of EN 81-21 is provided			Yes	☐	No	☐

3.0 The Well (continued)

3.1 g) Reduced bottom clearances			Yes	☐	No	☐
The lift is equipped with movable stops, or	N/A	☐	Yes	☐	No	☐
The lift is equipped with a pre-triggered stopping system	N/A	☐	Yes	☐	No	☐
3.1 h) Operation						
The lift is equipped with automatically operated movable stops/triggering devices, or	N/A	☐	Yes	☐		
The lift is equipped with manually operated movable stops/ triggering devices	N/A	☐	Yes	☐		
Confirm that the automatically operated movable stops/triggering devices operate in case of power failure (5.5.2.4.1 of EN 81-21)	N/A	☐	Yes	☐	No	☐
Confirm that, in case of power failure, and manually operated movable stops/triggering devices, a mechanical safety device maintains the car stationary (5.5.2.4.1 of EN 81-21)	N/A	☐	Yes	☐	No	☐
Confirm that, in case of manually operated movable stops/triggering devices,, the mechanical safety device is operated by the safety system designed according to 5.5.3 of EN 81-21 (5.5.2.4.2 of EN 81-21)	N/A	☐	Yes	☐	No	☐
Confirm that a signal visible and/or audible informs about the position of the movable stops/triggering devices (5.5.4 of EN 81-21)			Yes	☐	No	☐
3.1 i) Movable stops						
Confirm that the movable stops are installed in the pit to mechanically stop the car (5.7.2.1 of EN 81-21)	N/A	☐	Yes	☐	No	☐
Confirm that the movable stops are equipped with buffers complying with EN 81-1:1998 10.3 and 10.4 (5.5.2.1.2.1 of EN 81-21)	N/A	☐	Yes	☐	No	☐

3.0 The Well (continued)

3.1 l) Pre-triggered stopping system

Confirm that the pre-triggered stopping system operates properly (5.7.2.2 of EN 81-21)	N/A	☐	Yes	☐	No	☐
Confirm that the pre-triggered stopping system is type tested in compliance with EN 81-21 Annex C (5.7.2.2 of EN 81-21)	N/A	☐	Yes	☐	No	☐

3.1 m) Bottom clearance

Confirm that, when the car rests on the fully compressed buffers of the movable stops or buffering when the car is stopped by the pre-triggered stopping system, the following condition are satisfied at the same time (5.7.2.3 of EN 81-21) :

(i) Sufficient space below the car to accommodate a rectangular block 0.5m x 0.6m x 1.0m resting on one of its faces.	Yes	☐	No	☐	
(ii) A free vertical distance between the bottom of the pit and the lowest part of the car (excluding the area in (iii) below) of at least 0.5m	Yes	☐	No	☐	
(iv) A free vertical distance between highest parts in the pit and the lowest part of the car of at least 0.3m.	Yes	☐	No	☐	

Confirm that in the case of an inverted jack the distance between the ram head and the first striking point in the pit is at least 0.5m (0.1m with a screen)	N/A	☐	Yes	☐	No	☐
Confirm that In the case of a telescopic jack with a guided yoke confirm there is 0.5m between the lowest yoke and the pit floor with the jack fully collapsed	N/A	☐	Yes	☐	No	☐

3.1 n) Apron

Confirm that each car sill is equipped with an apron retracted under normal operation and manually extendable when needed complying 5.8.2 a) of EN 81-21	N/A	☐	Yes	☐	No	☐
Confirm that each car sill is equipped with an apron retracted under normal operation and automatically extended on opening any landing door with the emergency unlocking key complying 5.8.2 b) of EN 81-21	N/A	☐	Yes	☐	No	☐
Confirm that each car sill is equipped with an apron extended under normal operation and retracted when the car is reaching the lower position complying 5.8.2 c) of EN 81-21	N/A	☐	Yes	☐	No	☐
Confirm that, in case of extendable car apron, the warning required in 7.2.4 of EN 81-21 is provided	N/A	☐	Yes	☐	No	☐

3.0 The Well (continued)

3.4 Protection in the well

Confirm that in case of existing perforate well enclosure the openings complies with EN ISO 13857, clause 4.2.4.2, and	N/A	☐	Yes	☐	No	☐
The landing door locking device are protected against manipulation in compliance with 5.1 b) of EN 81-21	N/A	☐	Yes	☐	No	☐
Confirm that the distance between the car and the counterweight or balancing weight is at list 25 mm, and	N/A	☐	Yes	☐	No	☐
In this case, the lift is provided with emergency guidance on the car and counterweight	N/A	☐	Yes	☐	No	☐
Confirm that, in case of a separate well for the counterweight /balancing weight, the requirements in 5.3.1 and 5.3.2 of EN 81-21 are satisfied	N/A	☐	Yes	☐	No	☐
Confirm that, in case of diverter pulleys installed in the headroom of the well within the projection of the car, the requirements in 5.4 of EN 81-21 are satisfied	N/A	☐	Yes	☐	No	☐
Confirm that, in case of reduced top clearance, the warning required in 7.2.1 of EN 81-21 is provided	N/A	☐	Yes	☐	No	☐
Confirm that, in case of reduced pit clearance, the warning required in 7.2.3 of EN 81-21 is provided	N/A	☐	Yes	☐	No	☐

6.0 Controls

Safety System

Confirm that the an electrical safety device is able to (5.5.3.1 and/or 5.7.3.1 of EN 81-21) :		Yes ☐	No ☐	
a) Activate a safety system that neutralises normal operation		Yes ☐	No ☐	
b) Operate when any door/trap door giving access to car roof (or to the pit) is opened by means of a key		Yes ☐	No ☐	
c) Be bi-stable switch		Yes ☐	No ☐	
d) Be reset together with the resetting of the safety system		Yes ☐	No ☐	
Confirm that the resetting of the safety system and the return of the lift to normal operation is only possible by operation of an electrical reset device (5.5.3.2 and/or 5.7.3.2 of EN 81-21)		Yes ☐	No ☐	
Confirm that the resetting is possible only when (5.5.3.2.1 and/or 5.7.3.2.1 of EN 81-21) :		Yes ☐	No ☐	
a) the lift is not in inspection operation;		Yes ☐	No ☐	
b) the stopping device in the pit and on car roof are not in STOP position		Yes ☐	No ☐	
c) any door/trap door giving access to the car roof (or to the pit) is closed and locked		Yes ☐	No ☐	
d) the devices providing the safety spaces are in inactive position		Yes ☐	No ☐	
Confirm that a power failure do not reset the safety system (5.5.3.2.2 and/or 5.7.3.2.2 of EN 81-21)		Yes ☐	No ☐	
Confirm that the electrical reset devise is (5.5.3.3 and/or 5.7.3.3 of EN 81-21) :		Yes ☐	No ☐	
a) Lockable		Yes ☐	No ☐	
b) Placed outside the well and accessible to authorised persons only		Yes ☐	No ☐	
c) Monitored by an electrical safety device		Yes ☐	No ☐	
Conform that an additional final limit switch is installed in compliance with 5.5.3.4 and/or 5.7.3.4 of EN 81-21		Yes ☐	No ☐	
Confirm that normal operation of the lift is only possible if the movable stops or the triggering device are in the inactive position (5.5.3.5 and/or 5.7.3.5 of EN 81-21)		Yes ☐	No ☐	
Confirm that if the safety system has been activated , inspection operation is possible only if the movable stops or the triggering device are in the active position (5.5.3.6 and/or 5.7.3.6 of EN 81-21)		Yes ☐	No ☐	
Confirm that when the safety system has been activated and the movable stops or the triggering device are not In the active position, electrical emergency operation is possible only in down direction (in up direction) (5.5.3.7 and/or 5.7.3.7 of EN 81-21)	N/A ☐	Yes ☐	No ☐	

7.0 Car & Counterweight Safety Gear & Overspeed Protection

Tests before to put the lift into service

Confirm that, in case of reduced top clearance, no deterioration that could affect the normal use has occurred after have carried out the tests required in 6.2 a) of EN 81-21.	N/A	☐	Yes	☐	No	☐
Confirm that, in case of reduced pit clearance, no deterioration that could affect the normal use has occurred after have carried out the tests required in 6.2 b) of EN 81-21.	N/A	☐	Yes	☐	No	☐

11.0 Documentation

Confirm that, in case of reduced safety space, prior approval by national authorities (according to local regulation) is available			Yes	☐	No	☐
Confirm that instruction manual includes explanation of the functioning, use and maintenance complying with 7.1 of EN 81-21.			Yes	☐	No	☐
Confirm that, in case of pre-triggered system, the information required in 7.1 of EN 81-21 are included in the instruction manual	N/A	☐	Yes	☐	No	☐

Annex A – Additional Requirements For Unit Verification

The following describes additional tests and verification necessary when validating lift installations in accordance with Annex X of the Lifts Directive 95/16/EC.

A.1 – Documentation and Design

Confirm that technical dossier includes information about protective measures taken			Yes	☐	No	☐
Confirm that, in case of pre-triggered system, the test report required in C.5 of EN 81-21, or an equivalent type test certificate is included in the technical dossier	N/A	☐	Yes	☐	No	☐

APPENDIX F - Behaviour of lifts in the event of fire

Where lifts are provided with recall systems they shall comply to EN 81-73:2005 in addition to the requirements of EN 81-1:1998. Additional examinations and tests shall be carried out and recorded using the questionnaire given in Tables **E.**1 to **E.**3.

Table E.1 – Result of examination and test for hydraulic lifts – Lifts with recall systems – General characteristics

E.1.1 Input signals		
a) Is there an electrical recall signal provided by either a fire alarm system or a manual recall device?		**Yes** ☐
b) If the recall device is manual, is it:	**N/A** ☐	**Yes** ☐
1) bi-stable in operation? [see EN 81-73:2005, **5.1.1a**)]	**N/A** ☐	**Yes** ☐
2) clearly marked for position and purpose? [see EN 81-73:2005, **5.1.1b)** and **c)**]	**N/A** ☐	**Yes** ☐
3) located at the main designated floor or in the building management centre? [see EN 81-73:2005, **5.1.1d**)]	**N/A** ☐	**Yes** ☐
4) protected from misuse when accessible to all? [see EN 81-73:2005, **5.1.1e**)]	**N/A** ☐	**Yes** ☐
E.1.2 Stopped position		
Confirm that when stopped due to fault conditions, on inspection control or under emergency electrical control the recall signal does not cause the lift to move. (see EN 81-73:2005, **5.1.2**)		**Yes** ☐
E.1.3 Prohibition sign		
Confirm that a sign conforming to ISO 3864-1, warning against using the lift in the event of fire, has been provided at all landings. (see EN 81-73:2005, **5.1.3**)		**Yes** ☐

Table E.2 – Result of examination and test for hydraulic lifts – Lifts with recall systems – Behaviour

E.2.0 Behaviour

a) When a recall signal is received, confirm that the lift reacts as follows.

1) All landing and car controls including the door re-open button become inoperative. [see EN 81-73:2005, **5.3.1a**)] **Yes** ☐

2) All existing registered calls are cancelled. [see EN 81-73:2005, **5.3.1b**)] **Yes** ☐

3) If the lift has power-operated doors and is parked at a landing, the doors are closed and the lift returns to the designated floor. [see EN 81-73:2005, **5.3.1c**)1)] **N/A** ☐ **Yes** ☐

4) If the lift has manually operated doors and is parked at a landing with the doors open, it remains at the floor until the doors are closed and then returns to the designated floor. [see EN 81-73:2005, **5.3.1c**)2)] **N/A** ☐ **Yes** ☐

5) If the lift is travelling away from the designated floor, it makes a normal stop and then returns without opening the doors until arrival at the designated floor. [see EN 81-73:2005, **5.3.1c**)3)] **Yes** ☐

6) If the lift is travelling towards the designated floor, it continues without stopping until its arrival at the designated floor. [see EN 81-73:2005, **5.3.1c**)4)] **Yes** ☐

7) The lift remains stationary if any safety device has been operated. [see EN 81-73:2005, **5.3.1c**)5)] **Yes** ☐

E.2.0 Behaviour *(continued)*

b) Confirm that any door reversal devices that could be effected by smoke or heat are made inoperative by the recall signal. (see EN 81-73:2005, **5.3.2**) **N/A** ☐ **Yes** ☐

c) Confirm that the automatic dispatch of the lift to the lowest landing level as required by EN 81-2:1998, 14.2.1.5b) has been rendered inoperative (see EN 81-73:2005, **5.3.3**) **Yes** ☐

d) Confirm that a fault on a lift which is part of a group does not prevent recall of the other lifts in the group. (see EN 81-73:2005, **5.3.4**) **N/A** ☐ **Yes** ☐

e) Confirm that on arrival at the designated floor, lifts with power-operated doors park with the doors open and are removed from service. (see EN 81-73:2005, **5.3.5**) **N/A** ☐ **Yes** ☐

f) Confirm that on arrival at the designated floor, lifts with manually operated doors park with the doors unlocked and are removed from service. (see EN 81-73:2005, **5.3.6**) **N/A** ☐ **Yes** ☐

Table E.2 – Result of examination and test for hydraulic lifts – Lifts with recall systems – Behaviour

g)	Confirm that the lift returns to normal service either by an automatic signal from the fire alarm system or the reset of the manual recall device. (see EN 81-73:2005, **5.3.7**)		**Yes**	☐
h)	Confirm that a "No Entry" sign in accordance with EN 81-73:2005, **5.3.8** is displayed at the designated floor whist the lift is out of service. *NOTE The sign should have a diameter not less than 25 mm if it is in the landing controls, otherwise it should have a diameter not less than 50 mm.*		**Yes**	☐
i)	Where multiple designated floors are required, confirm that an additional electrical signal will recall the lift to an alternative floor.	**N/A** ☐	**Yes**	☐

Table E.3 – Result of examination and test for hydraulic lifts – Lifts with recall systems – Documentation

Confirm that documentation has been provided in the user manual relative to the recall controls and the need for regular tests to be carried out.	**Yes**	☐

APPENDIX G – Lift according to EN 81-71 (Vandalism)

Where lifts are provided with features to combat vandalism they shall comply to EN 81-71:2005 in addition to the requirements of EN 81-1:1998. Additional examinations and tests shall be carried out and recorded using the questionnaire given in Tables D.1 to D.9.

NOTE 1 The tester needs to be aware of all negotiations between the owner and the lift installer, in order to enable a correct response to these items. For example this is particularly important in respect of the choice between category 1 and category 2 installations.

For tests relating to audible signals the reading shall be taken one metre from the source of the sound.

NOTE 2 It is not generally expected that a decibel reading will be necessary to confirm compliance or if required it is to verify that adjustable devices have been correctly set.

Table G.1– Result of examination and test for lifts – Lifts with features to combat vandalism – Lift well

G.1.1 Well enclosure				
a) Confirm that the well enclosure is imperforate and meets the requirements for materials and strength given in EN 81-71:2005, **5.1.1.1**.			**Yes**	
b) Confirm that partial well enclosures for category 1 lifts are a minimum of 5 m high in accordance with EN 81-71:2005, **5.1.1.2**.	**N/A**		**Yes**	
c) Confirm that category 2 lifts are installed in a totally enclosed well in accordance with EN 81-72:2005, **5.1.1.3**.	**N/A**		**Yes**	
G.1.2 Inspection and emergency doors and inspection traps				
a) Confirm that inspection and emergency doors and inspection traps cannot be opened with any of the items listed in EN 81-71:2005, Table E.1.	**N/A**		**Yes**	
b) Confirm that such doors are of sufficient strength as required by EN 81-71:2005, **5.1.2.2**.			**Yes**	
D.1.3 Well ventilation				
Confirm that ventilation openings are in accordance with EN 81-71:2005, **5.2.3** and **5.2.4** (i.e. smaller than 250 mm × 250 mm, protected from objects passing through and of similar strength to the well enclosure).	**N/A**		**Yes**	

Table D.2 – Result of examination and test for lifts – Machinery spaces, pulley spaces and machinery cabinets

a) Confirm that materials used in the construction of any machinery space, pulley space or cabinet outside of the well are in accordance with EN 81-71:2005, **5.1.1.1**.			**Yes**	☐
b) Confirm that where windows have been provided and are accessible to persons, their strength is in accordance with EN 81-71:2005, **5.1.1.1**.	**N/A**	☐	**Yes**	☐
c) Confirm that ventilation openings are in accordance with EN 81-71:2005, **5.2.3** and **5.2.4** (i.e. smaller than 250 mm × 250 mm, protected from objects passing through and of similar strength to the well enclosure).			**Yes**	☐
d) Confirm that doors and trapdoors with their locks meet the strength requirements of EN 81-71:2005, **5.1.2.2**.	**N/A**	☐	**Yes**	☐
e) For category 2 lifts, confirm that an intruder alarm:	**N/A**	☐	**Yes**	☐
1) operates if a machine room door, pulley room door, inspection door, emergency door, inspection trap or cabinet door is opened in accordance with EN 81-71:2005, **5.2.6**.;	**N/A**	☐	**Yes**	☐
2) operates an audible alarm within 30 s after opening any of the doors in 1) in accordance with EN 81-71:2005, **5.2.6**.;	**N/A**	☐	**Yes**	☐
3) is audible at the intrusion point and the main access floor at a volume level of 70 dB(A) to 85 dB(A) in accordance with EN 81-71:2005, **5.2.6a)**;	**N/A**	☐	**Yes**	☐
4) stops automatically between 5 min and 15 min from activation in accordance with EN 81-71:2005, **5.2.6b)**.	**N/A**	☐	**Yes**	☐

Table D.3 – Result of examination and test for lifts – Lifts with features to combat vandalism – Landing and car doors

D.3.1 Landing and car door construction

a)	Confirm that car and landing doors are automatic horizontal sliding power-operated and constructed of materials in accordance with EN 81-71:2005, **5.3.1.1**.		**Yes**	☐
b)	Confirm that car and landing door assemblies have been designed to remain operative when tested in accordance with the shock test specified in EN 81-71:2005, **5.3.1.2**.		**Yes**	☐
c)	Confirm that doors have been provided with a retaining device capable of withstanding the shock test specified in EN 81-71:2005, **5.3.1.3**.		**Yes**	☐
d)	For category 2 lifts, confirm that vision panels have not been used in accordance with EN 81-71:2005, **5.3.1.4**.	**N/A** ☐	**Yes**	☐
e)	For category 2 lifts, confirm that the construction of the car and landing doors and clearances is in accordance with EN 81-71:2005, **5.3.1.5**.	**N/A** ☐	**Yes**	☐
f)	For category 2 lifts, confirm that in addition to the requirements of EN 81-1, **7.2.3.2** it is not possible to pass a rod of 10 mm diameter from the landing side of the entrance into the well.	**N/A** ☐	**Yes**	☐
g)	For category 2 lifts, confirm that where door panels are mechanically linked they cannot be disengaged by unauthorised persons within 60 s with the tools listed in EN 81-71:2005, Annex E.	**N/A** ☐	**Yes**	☐
h)	For category 2 lifts, confirm that the leading edge profile of the car and landing door is formed as an integral part of the door in accordance with EN 81-71:2005, **5.3.1.8**.	**N/A** ☐	**Yes**	☐

D.3.2 Landing door security system – Category 2 lifts only

a)	Confirm that at any floor where the lift is not present it is not possible to open the landing door with the emergency unlocking key described in EN 81-1, **7.7.3.2**, or by using a tool from EN 81-71:2005, Annex E, unless the security system has been deactivated in accordance with EN 81-71:2005, **5.3.2.1**.	**N/A** ☐	**Yes**	☐
b)	Confirm that a device to manually active and de-activate the system is provided in the machine room, the control cabinet or the emergency and inspection panel in accordance with EN 81-71:2005, **5.3.2.2**.	**N/A** ☐	**Yes**	☐

D.3.2 Landing door security system – Category 2 lifts only *(continued)*

c)	Confirm that the device and the main lift entrance floor have been labelled with a pictogram in accordance with EN 81-71:2005, Annex C.	**N/A** ☐	**Yes**	☐
d)	Confirm that the security system is timer-operated in accordance with EN 81-71:2005, 5.3.2.3.	**N/A** ☐	**Yes**	☐

Table D.3 – Result of examination and test for lifts – Lifts with features to combat vandalism – Landing and car doors

e) Confirm that in the event of mains power failure, the system remains active for a period of not less than 2 h, but in the event of disconnection of the mains switch, the system is immediately deactivated in accordance with EN 81-71:2005, 5.3.2.4.	**N/A** ☐	**Yes** ☐
f) Where the system is installed on:		
1) fire-fighting lifts conforming to EN 81-72:2003, confirm that the system can be deactivated by turning the lift on to "Fire Control" in accordance with EN 81-71:2005, 5.3.2.5.;	**N/A** ☐	**Yes** ☐
2) lifts conforming to EN 81-73, confirm that the system can be deactivated on receipt of an input signal in accordance with EN 81-73:2005, 5.1.1. and EN 81-71:2005, 5.3.2.5.	**N/A** ☐	**Yes** ☐
D.3.3 Door coupling mechanism		
For category 2 lifts, confirm that it is not possible to de-couple the car and landing doors within 60 s with the tools listed in EN 81-71:2005, Annex E.	**N/A** ☐	**Yes** ☐
D.3.4 Door reversal mechanism		
For category 2 lifts, confirm that protective devices for reversal of car and landing doors are inaccessible to unauthorized persons in accordance with EN 81-71:2005, **5.3.4**.	**N/A** ☐	**Yes** ☐
D.3.5 Locking of car doors		
Confirm that the car doors are provided with a locking device in accordance with EN 81-1:1998, 8.9.3.		**Yes** ☐
D.3.6 Manipulation of door operators and locks		
For category 2 lifts, confirm that it is not possible to manipulate the door operator or locks within 60 s with the tools listed in EN 81-71:2005, Annex E.	**N/A** ☐	**Yes** ☐

Table D.4 – Result of examination and test for lifts – Lifts with features to combat vandalism – Car

D.4.1 Car bodywork, interior and fixings		
a) Confirm that the car walls have a mechanical strength in accordance with EN 81-71:2005, **5.3.1.2**.		**Yes** ☐
b) For category 1 lifts, confirm that car ceilings can support a mass of 150 kg at any point a person can suspend themselves, and are fixed such that they cannot be displaced within 60 s with the tools listed in EN 81-71:2005, Annex E.	**N/A** ☐	**Yes** ☐
c) For category 2 lifts, confirm that the ceiling is such that no person can suspend themselves in accordance with EN 81-71:2005, **5.4.1.3**..	**N/A** ☐	**Yes** ☐
d) Confirm that materials used for the car construction and finishes conform to EN 81-71:2005, **5.4.1.4**.		**Yes** ☐
e) Confirm that car bodywork is resistant to being cut through with the tools listed in EN 81-71:2005, **5.4.1.5** and Annex E.		**Yes** ☐
f) Confirm that car flooring has been fixed so as not to create a tripping hazard if cut in accordance with EN 81-71:2005, **5.4.1.6**.		**Yes** ☐
g) For category 2 lifts, confirm that any handrail is capable of supporting at its most unfavourable point a load of 2 500 N applied in any direction in accordance with EN 81-71:2005, **5.4.1.7**.	**N/A** ☐	**Yes** ☐
h) For category 2 lifts, confirm that any mirror is flush fitted and laminated if made from glass in accordance with EN 81-71:2005, **5.4.1.8**.	**N/A** ☐	**Yes** ☐
i) Confirm that fixtures and fittings are removable only with special tools (category 1 lifts) or have fixings not visible to users (category 2 lifts) in accordance with EN 81-71:2004, **5.4.1.9**.		**Yes** ☐
D.4.2 Car emergency doors and trapdoors		
For category 2 lifts, confirm that emergency doors or trapdoors have been provided with a security system in accordance with EN 81-71:2005, **5.3.2**.	**N/A** ☐	**Yes** ☐
D.4.3 Car ventilation		
Confirm that normally accessible ventilation has been guarded against a straight rod being pushed through in accordance with EN 81-71:2005, **5.4.3**.		**Yes** ☐

Table D.4 – Result of examination and test for lifts – Lifts with features to combat vandalism – Car

D.4.4 Car lighting	
a) Has permanent car lighting been provided to give 100 lux minimum at control devices and at floor level in accordance with EN 81-71:2005, **5.4.4.1**?	**Yes** ☐
b) Confirm that car light fittings:	
1) are flush fitted without visible fixings in accordance with EN 81-71:2005, **5.4.2**;	**Yes** ☐
2) remain functional and unbroken when tested in accordance with EN 81-71:2005, Annexes B and F.	**Yes** ☐

Table D.5 – Result of examination and test for lifts – Lifts with features to combat vandalism – Car and landing fixtures

D.5.1 Car and landing controls	
a) Confirm that control buttons, indicators and other fixtures are water resistant in accordance with EN 60529:1992, IPX3 in accordance with EN 81-71:2005, 5.5.1.1.	**Yes** ☐
b) Confirm that the button/bezel gaps been reduced to a minimum to avoid jamming in accordance with EN 81-71:2005, 5.5.1.2.	**Yes** ☐
c) Confirm that control buttons, indicators and other fixtures are resistant to impact in accordance with EN 81-71:2005, Annex B and 5.5.1.3.	**Yes** ☐
d) Confirm that control buttons, indicators and other fixtures are resistant to being cut with the tools listed in EN 81-71:2005, Annex E and 5.5.1.4.	**Yes** ☐
e) Confirm that control buttons, indicators and other fixtures are resistant to flame in accordance with EN 81-71:2005, Annex F and 5.5.1.5.	**Yes** ☐
D.5.2 Car and landing control stations	
a) Confirm that car operating panels and landing control stations are:	
i) removable only with special tools (category 1 lifts) or have fixings not visible to users (category 2 lifts) in accordance with EN 81-71:2005, 5.4.1.9.	**Yes** ☐
ii) made from flame-resistant materials (category 1 lifts) or inflammable (category 2 lifts) in accordance with EN 81-71:2005, 5.4.1.4.	**Yes** ☐
iii) resistant to impact in accordance with EN 81-71:2005, Annex B.	**Yes** ☐
iv) resistant to being cut with the tools listed in EN 81-71:2005, Annex E.	**Yes** ☐

Table D.5 – Result of examination and test for lifts – Lifts with features to combat vandalism – Car and landing fixtures

b) Confirm that signs and marking accessible to the public are resistant to flame in accordance with EN 81-71:2005, Annex F.	**Yes** ☐
D.5.3 Position indicators	
Confirm that a position indicator has been provided at the main floor in accordance with EN 81-71:2005, 5.5.3.	**Yes** ☐

Table D.6 – Result of examination and test for lifts – Lifts with features to combat vandalism – Alarm sounder

a) Confirm that unless the car is at a floor with the doors open, operation of the alarm button causes an audible alarm for 60 s within the car at a volume of 70 dB(A) to 85 dB(A) in accordance with EN 81-71:2005, **5.6a)**.	**Yes** ☐
b) Confirm that the audible alarm ceases if the car doors open during the sounding of the alarm in a).	**Yes** ☐

Table D.7 – Result of examination and test for lifts – Lifts with features to combat vandalism – Steel work

For category 2 lifts, confirm that measures to prevent corrosion of the car sling, car and landing doors, landing door locks and car walls and floor have been provided in accordance with EN 81-71:2005, **5.7**.	**N/A** ☐	**Yes** ☐

Table D.8 – Result of examination and test for lifts – Lifts with features to combat vandalism – Signs and markings

a) Confirm that signs and marking accessible to the public are fixed in a manner that prevents removal and cannot be made illegible within 60 s with the tools listed in EN 81-71:2005, Annex E.	**Yes** ☐
b) Confirm that signs and marking accessible to the public are resistant to flame in accordance with EN 81-71:2005, Annex F.	**Yes** ☐

Table D.9 – Result of examination and test for lifts – Lifts with features to combat vandalism – Documentation

Confirm that the user manual contains information relating to the special features of the vandal-resistant lift, for both the owner and maintenance company.	**Yes** ☐

APPENDIX H - EN 81-28 – ALARM SYSTEM

When a lift is installed in accordance with the Lifts Directive a test of the alarm device is required to show conformity to the ESR 4.5.

Confirm that in the technical dossier of the lift is present the declaration of conformity of the manufacturer of the alarm system, according to standard EN 81-28.			Yes	☐	No	☐
Confirm that the emission of alarm information to the alarm equipment transmitter is not delayed, except during filtering.			Yes	☐	No	☐
Confirm that the alarm system accepts communication from the rescue service until the end of the alarm has occurred.			Yes	☐	No	☐
Check that the means to initiate the end of alarm is out of the reach of any non-competent person.			Yes	☐	No	☐
Confirm that no alarm is impeded or lost in cases of electrical power supply switching or power supply failure.			Yes	☐	No	☐
Confirm that after the operation of the alarm initiation device, no further action from the trapped users is necessary.			Yes	☐	No	☐
Confirm that after the initiation of the alarm, the trapped users are not able to interrupt the two-way communication.			Yes	☐	No	☐
Confirm that the user can always, during an alarm, re-initiate connection to the rescue service should this be necessary.			Yes	☐	No	☐
Confirm that the alarm equipment is not accessible to passenger(s) in accordance with EN 81-28:2003, 4.2.4.			Yes	☐	No	☐

	NB-L **CO-ORDINATION OF NOTIFIED BODIES** **LIFTS DIRECTIVE** **95/16/EC**	**NB-L/REC 0/005** **version: 03** **date: 17-07-2008**

NB-L RECOMMENDATION FOR USE

Keywords: European data base, withdrawn certificates, Notified Bodies, Member states	**Proposed by NB-L on 21.11.2007** **Decided by NB L/HC on 21.11.2007** **Modified by NB-L/HC on -** **StC: to be approved** **by WP ☐ done on -** **by OP ☒ done on 28.04.2008**
Related to Directive: 95/16/EC **Article: Annex: Clause:**	**prEN/EN:** **Clause:**

Question:

Which procedure do the Notified Bodies use to satisfy the obligation of communication to the other Notified Bodies and the Member States related to the withdrawn certificates?

Answer:

The Notified Bodies shall send the communications on the withdrawn certificates in the form of lists to the Technical Secretariat including a copy of the withdrawn certificate. Both the list and the copy of the certificate shall be sent by e-mail.

The communication and the documents mentioned above shall be sent within a short time after the withdrawal of the certificate.

The content and the form of the lists shall be drawn up following the minimum details mentioned in the following table in order to have a common style.

Number of certificate	Number of the certificate as it *appears* on the document delivered by the notified *body*.
Released by	Name and *legal structure* of the notified *body* which has *released* the certificate
Notified Body N°	*Identification* number of the notified *body*
Country	*Residential* country of the notified *body*
Release date	Date in which the certificate was *released*
Released for	Name and *legal structure* of the *lift-installer to whom* the certificate *is entitled*
Limit of validity	For all certificates having a limited validity, indication of the *final* validity date of the certificate. *For all certificates* which do not have a limited validity, the indication "*unlimited*" shall appear.
Type of *procedure*	The *procedure with* which the certificate is *released* (for example, final *inspection*, *lift* quality assurance, etc.)
Annex	Annex which has been used as reference for the *certification*
Identification code of the technical dossier of reference	*Identification code* of the *technical* file *used* by the notified body *for releasing* the certificate.
Date of certificate withdrawal	
Justification of withdrawal	
Identification code of the technical dossier justifying the withdrawal of the certificate	*Identification code* of the *technical* file *used* by the notified *body* containing the documents which justify the withdrawal of the certificate.
Safeguard procedure	*Identify whether a safeguard procedure concerning* products *covered by* the certificate exists.
Safeguard procedure initiated by	*Identify* the country*(ies)* having started a *safeguard* procedure concerning the products *covered by* the certificate

The Technical Secretariat will update the European database related to the withdrawn certificates with the details sent by the Notified Bodies. After that, the database will be uploaded with a copy of the withdrawn certificates, placed in dedicated folder, in the section “NBG:Lifts Notified Bodies Group” of Circa – Notified Bodies Network. The details of the withdrawn certificates and the copy of the relevant certificates will be sent to the Commission so that the Member States receive a communication on them.

History: presented and approved at the 20th NB-L/HC meeting held on 20-21 November 2007.

According to the "Rules of Procedure", clause 2.7, the Notified Bodies are expected to take the recommendations into consideration

	NB-L **CO-ORDINATION OF NOTIFIED BODIES** **LIFTS DIRECTIVE** **95/16/EC**	**NB-L/REC 1/001** **version: 03** **date: 01-07-04**

NB-L RECOMMENDATION FOR USE

Keywords: Conformity Assessment Procedure (CAP), Safety device, Type examination, Test procedure,	**Proposed by TS on 97-06-11,** **Decided by NB-L/HC on 00-01-19,** **Modified by NB-L/HC on**
	StC: to be approved **by WP X done on 00-12-31** **by OP ☐ done on**
related to Directive: 95/16/EC **Article: 8 (1) Annex: IV, V (A) Clause:**	**prEN/EN: EN 81-1/2:1998** **Clause: Annex F**

Question:

Which test procedures shall be used for EC-type examination of safety components?

Answer:

The European standards EN 81-1 and –2:1998 describe in their Annexes F procedures for the type examination of safety components mentioned in Annex IV of the Lifts Directive, which are partially in use since many years and have been proven good.

History: Decision of NB-L/HC, 1st meeting 1997-06-11, adopted in 6th NB-L/HC meeting, adopted by StC, editorially amended to new format of REC 01-07.04.

According to the "Rules of Procedure", clause 2.7, it is expected that Notified Bodies take recommendations into consideration

NB-LIFT	**NB-L CO-ORDINATION OF NOTIFIED BODIES LIFTS DIRECTIVE 95/16/EC**	**NB-L/REC 1/002 version: 06 date: 2014-05-07**

NB-L RECOMMENDATION FOR USE

Keywords: **CAP, Safety component, Type examination, Certificate**		**Proposed by NB-L on 21.05.2013** **Approved by NB-L/HC on 21.05.2013** **Modified by NB-L/HC on -**
		StC: to be endorsed **by WP X done on 2013.12.11** **by OP ☐ done on**
Related to Directive: 95/16/EC **Article : 8 (1)** **Annex: IV, V (A)**	**Related to other directives:** **Annex: - , Clause: -**	**prEN/EN:** **EN81-1/2 : 1998 + A3 : 2009** **Annex : F**

Question:

What shall be the content of an EC-type examination certificate for safety components?

Answer:

The lift directive 95/16/EC, annex V (A), item 5 requires the following:

"*The certificate must contain the name and address of the manufacturer of the safety component, the conclusions of the check, any conditions of validity of the certificate and the particulars necessary to identify the approved type."*

The harmonized standards EN81-1/2: 1998 + A3: 2009, as harmonized to the lift directive, give a more detailed description about the content of (EC) Type Examination Certificates*.

The minimum, general content of (EC) Type Examination Certificates* is specified in annex EN81-1/2: 1998, Annex F.0.2.

The minimum, specific content of (EC) Type Examination Certificates* is specified in

- EN81-1/2: 1998, Annex F.1 for landing door locking devices
- EN81-1/2: 1998, Annex F.3 for safety gear
- EN81-1/2: 1998, Annex F.4 for overspeed governors
- EN81-1/2: 1998, Annex F.5 for buffers
- EN81-1/2: 1998, Annex F.6 for safety circuits containing electronic components and/or programmable electronic systems (PESSRAL)
- EN81-1: 1998, Annex F.7 for ascending car overspeed protection means
- EN81-2: 1998, Annex F.7 for rupture valve / one-way restrictor

* … the indication of "EC" shall only be used for those safety components, which are listed in annex IV of lift directive 95/16/EC and excludes "Unintended car movement protection means", which is not listed as safety component according to lift directive 95/16/EC, annex IV but listed in EN81-1/2: 1998 + A3: 2009, annex F.8.

Any other relevant information, which is essential for the safe application of the safety component, shall additionally be provided in the certificate or its annex, forming a part of the certificate.

The particulars necessary to identify the approved type shall be also specified in the EC Type Examination Certificate and can be provided by means of drawing(s) and detailed description.

History: Decision of NB-L/HC, 1st meeting 1997-06-11, adopted in 6th NB-L/HC meeting, adopted by StC, editorially amended to the new format of REC 01-07-04, during 29th NB-L meeting was opened new work item to revise this RFU, meeting 17.04.2013: V04 proposed, old text replaced according current state. Reconsidered by the NB-L/AH-SC group and approved at the 31st NB-L meeting held on 21-22 May 2013.

According to the "Rules of Procedure", clause 2.7, it is expected that Notified Bodies take recommendations into consideration

DN: L-REC-1-002

	NB-L **CO-ORDINATION OF NOTIFIED BODIES** **LIFTS DIRECTIVE** **95/16/EC**	**NB-L/REC 1/003** **version: 03** **date: 01-07-04**

NB-L RECOMMENDATION FOR USE

Keywords: CAP, Safety component, Type examination, manufacturing procedures	**Proposed by NB on 97-10-07,** **Decided by NB-L/HC on 00-01-19,** **Modified by NB-L/HC on**
	StC: to be approved **by WP X done on 00-12-31** **by OP ☐ done on**
related to Directive: 95/16/EC **Article: 8 (1) Annex: IV; V (A) Clause: 3, last ident**	**prEN/EN:** **Clause:**

Question:

Does the requirement of Lifts Directive Annex V (A) clause 3 last ident (steps taken at the manufacturing stage to ensure that series-produced safety components conform to the safety component examined) mean that the manufacturer has to make a choice between the possibilities of Annex VIII (approval of a system) and Annex XI (random checking by NB) ?

Answer:

No. The requirement is related to internal procedures of production control the manufacturer intends to follow in order to be sure that the produced safety components are in compliance with the type examined model.

History: Decision of NB-L/HC, 2nd meeting, 1997-10-08, adopted in 6th NB-L/HC meeting, adopted by StC, editorially amended to new format of REC 01-07-04

According to the "Rules of Procedure", clause 2.7, it is expected that Notified Bodies take recommendations into consideration

	NB-L **CO-ORDINATION OF NOTIFIED BODIES** **LIFTS DIRECTIVE** **95/16/EC**	**NB-L/REC 1/005** **version: 05** **date: 17-09-2007**

NB-L RECOMMENDATION FOR USE

Keywords: **Electric safety devices, Type examination**	**Proposed by NB-L on 98-06-15,** **Decided by NB-L/HC on 00-06-05,** **Modified by NB-L/HC on**
	StC: to be approved **by WP X done on 07.09.13** **by OP ☐ done on**
related to Directive: 95/16/EC **Article: -** **Annex: IV, 6; V (A)** **Clause: -**	**prEN/EN: -** **Clause: -**

Question:

What has to be respected at the EC-Type examination of electric safety devices?

Answer:

In addition to REC 1/004, the following has to be taken into consideration with electric safety devices:

1. As shown in figure 1, electric safety devices can be designed differently. Only a design in accordance with d) is a safety device in the sense of Lifts Directive, Annex IV, 6.

   Item a):
   is a safety contact as mentioned in Annex A and clause 14.1.2.2. of the EN81-1 and 2.

   Item b):
   is a safety circuit which could be in wiring and relays or all relays mounted on a print board with print paths making the circuit wiring. The safety circuit should be made up according to clause 14.1.2.3 and makes a reference to Annex H of EN81-1 and 2 if it is circuitry mounted on PCB that means the design rules of Annex H shall be followed.

   Item c):
   is a PCB without electronic components and contains only terminals and circuitry to connect the different terminal points. This type of equipment shall fulfil clause 13.2.2.3. with a reference to clause 14.1.2.2.3 with a reference to the design rules of Annex H (creepage distances etc.)

   Item d):
   Is a PCB with electronic components which influence a part of the safety chain. This type of equipment shall fulfill clause 14.1.2.2.3 with a reference to Annex F6 which means subject to type testing and a CE-marking of the PCB.

   Item e):
   is a PCB which contains electronic circuitry using taps from the different points of the safety chain to make logic decisions in the control. This type shall fulfil clause 14.1.2.1.3 with a reference to clause 14.1.2.3. with a reference to design rules of Annex H of the EN81-1 and 2 (creepage distances etc.).

continued

History: Question from the 3rd meeting of NB-L/HC to CEN/TC 10/WG 1, answer from CEN/TC 10/WG 1, 4th and 5th meeting of NB-L/HC, proposal of an ad hoc group, modified in 6th NB-L/HC meeting, amended in accordance with the wish of CEC.

2. Item e) may be a type tested (with CE-marking) which results in an easy acceptance during testing by Notified Bodies before putting the lift into service. Not following the type testing (no CE marking) means that all the questions, raised during the check on site by the Notified Body, shall be answered by the manufacturer. Specially if multi-layer boards are used the need for drawings of the lay-out to inform the inspection bodies shall be available.

3. Only the safety circuits and not the whole safety chain have to be type examined. The whole safety chain cannot be type tested due to the fact that the field is wiring the terminals and cannot be wired in a single way of design.

4. In case of current paths of electric safety circuits run on PCB's which have no other function in this circuitry just follow the design rules of Annex H of EN81-1 and 2 in regard to clearance and creepage distances. Air gaps and creepage distances between paths of the electric safety chain on PCB without any further elements of electric safety devices and adjacent parts of the control have to fulfil the requirements of electric safety devices. Relevant proofs are not part of the type examination, but have to be carried out during the other conformity assessment procedures in accordance with Art. 8 (2) of LD.

5. Annex H of EN 81-1/2:1998 is not a description of electronic elements and also not a list of electronic elements allowed to be used in electric safety circuits. It only states the conditions under which at the specified elements failures according to EN 81-1/2, 14.1.1.1 can be excluded.

6. It is recognized that the devices connected to the safety chain for gathering information are not electric safety components in the sense of the Lift Directive 95/16/EC Annex IV but it is the duty of the manufacturer to design the devices according to the design rules of Annex H of EN81-1 and 2 and for the circuits which can influence the safety chain, especially 14.1.2.1.3 to assure that bridging of electric safety device(s) is not possible. The proof that this requirement is fulfilled can be made by the way of a certified examination of a competent body (recommendation to the manufacturers to call in a NB for annex IV,6 components on that case or implementing a system according to Annex IX or XIII). In any case the test procedures shall be that of EN 81-1/2:1998, Annex F.6; the manufacturer has to make a written declaration about these laboratory tests (Annex F.6 of EN 81-1/2:1998)

7. Where changes in a safety circuit with electronic components are necessary in the course of a type examination of a lift/model lift the notified body having certified this electric safety device shall be contacted if the modification of the electric safety component used in the model lift is influencing the defined limits (range of application and interfacing parameters) or the test certificate number itself of the safety device. A re-certification shall be limited to the impact of the changes of the component to the model lift by the original Notified Body and not a complete type test procedure for the whole model lift.

   Note:

   The certificate of a model lift shall at least describe the certified components used in the model lift. If one of these components has to be changed, due to non-availability on the market or price considerations, to an other component having the same characteristic but other certificate, it does not make sense to do a complete new type testing of the whole lift, if the limits of application fit the use of the model lift. The type examination shall be limited to the component only and verify the use within the range of application.

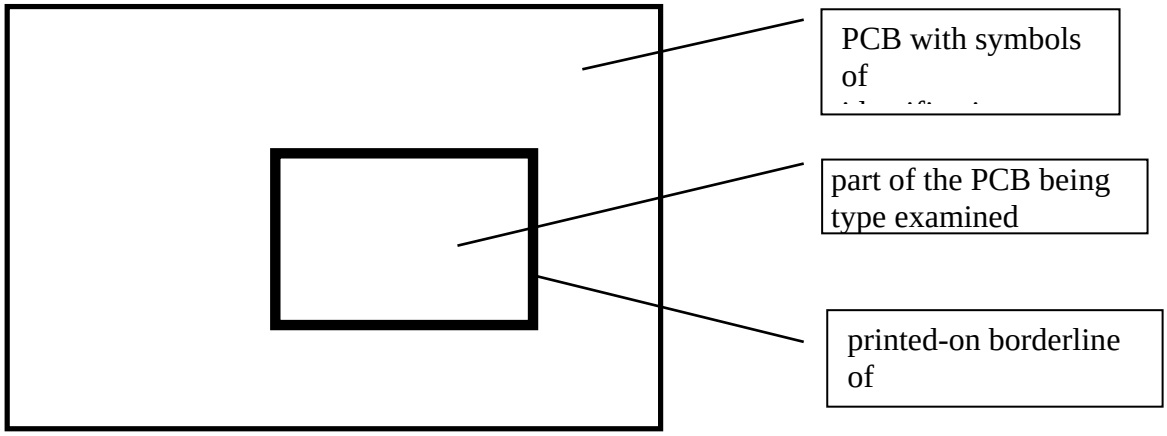
8. During the type examination of a lift/lift model according to Annex V (B) or the unit verification following Annex X an examination of the wiring diagram and the electric installation is necessary. Regarding PCB the check of sufficient air gaps/creepage distances is possible by using the layout drawings. Since the transposition of the layout drawings to the PCB is done photographically, it can be assumed that the PCB corresponds to the layout drawing. Part of the examination is also the proof, whether the elements indicated by the manufacturer are mounted on the PCB.

Since the breaking off of the failure analysis allowed according to figure 6 of EN 81-1/2:1998 is based on the assumption, that examinations and tests are carried out on a new installed lift before putting it into service, functional tests of the electric safety devices installed in a given lift and, if need be, of their bridging circuits (e. g. door bridging) have to be carried out during examinations according to Annex VI or X.

continued

9. Where electronic elements in an electric safety circuit influence during the failure analysis in accordance with EN 81-1/2, figure 6 the decision "acceptable" or "not acceptable", the electric safety device has to be regarded as safety component in the sense of LD; Annex IV, 6. This also applies where electronic elements are used in the sense of power transmission to operate the main contactors.

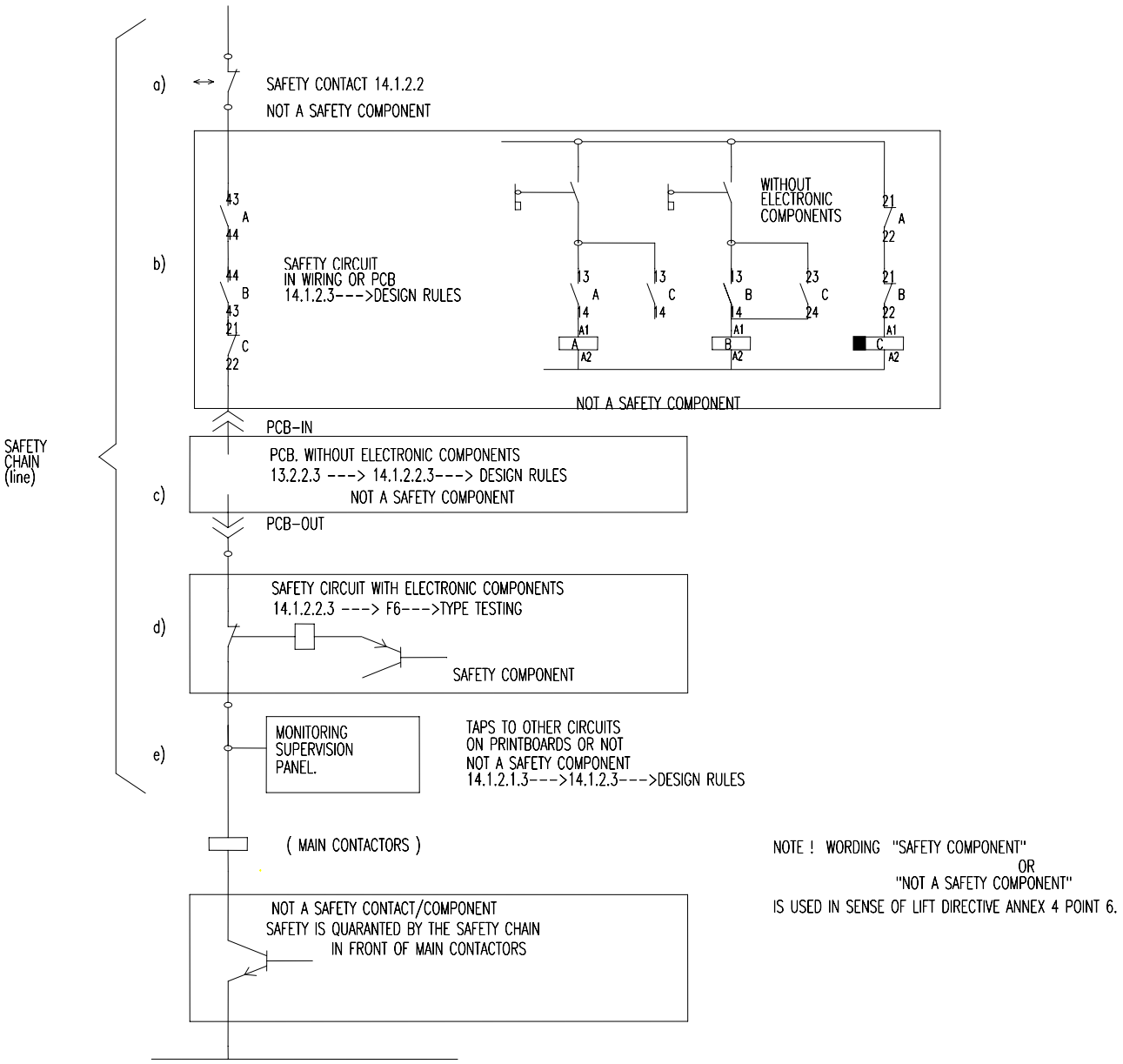
10. The marking of an electric safety device being type examined can be realised by using the
11.
12.
13. identification of the PCB on which it is placed and a printed on borderline surrounding the type examined part



12. The certificate of the type examined electric safety component shall, if need be, indicate specifications about the usability of the safety device, e.g. replacement of a door locking contact, range of temperature to be observed, protection degree of boxes in which the safety component shall be installed.

13. The failure analysis of safety circuits is based on the assumption that at the latest where the car is changing its travelling direction there will occur in the safety circuit a change of a signal allowing to detect failure in function. Some of the electric safety devices in a lift are not actuated during normal operation, e. g. limit switches, switches at the overspeed governor or at the safety gear. Replacement of these contacts by a safety circuit would only be acceptable if the circuit contains a routine giving at certain intervals changes in signal and by that allowing to detect failure in function.

continued


SAFETY CHAIN (line)
a)
SAFETY CONTACT 14.1.2.2
NOT A SAFETY COMPONENT
b)
SAFETY CIRCUIT
IN WIRING OR PCB
14.1.2.3--->DESIGN RULES
WITHOUT ELECTRONIC COMPONENTS
NOT A SAFETY COMPONENT
PCB-IN
c)
PCB. WITHOUT ELECTRONIC COMPONENTS
13.2.2.3 ---> 14.1.2.2.3---> DESIGN RULES
NOT A SAFETY COMPONENT
PCB-OUT
d)
SAFETY CIRCUIT WITH ELECTRONIC COMPONENTS
14.1.2.2.3 ---> F6--->TYPE TESTING
SAFETY COMPONENT
e)
MONITORING SUPERVISION PANEL.
TAPS TO OTHER CIRCUITS
ON PRINTBOARDS OR NOT
NOT A SAFETY COMPONENT
14.1.2.1.3--->14.1.2.3--->DESIGN RULES
(MAIN CONTACTORS)
NOT A SAFETY CONTACT/COMPONENT
SAFETY IS QUARANTED BY THE SAFETY CHAIN
IN FRONT OF MAIN CONTACTORS
NOTE ! WORDING "SAFETY COMPONENT"
OR
"NOT A SAFETY COMPONENT"
IS USED IN SENSE OF LIFT DIRECTIVE ANNEX 4 POINT 6.

	NB-L **CO-ORDINATION OF NOTIFIED BODIES** **LIFTS DIRECTIVE** **95/16/EC**	**NB-L/REC 1/007** **version: 03** **date: 01-07-04**

NB-L RECOMMENDATION FOR USE

Keywords: CAP, safety component, rupture valve, Sealing of adjustment	**Proposed by NB-L on 98-11-12,** **Decided by NB-L/HC on 00-01-19,** **Modified by NB-L/HC on**
	StC: to be approved **by WP X done on 00-12-31** **by OP ☐ done on**
related to Directive: 95/16/EC **Article: 8 (1) Annex: IV, 5 Clause:**	**prEN/EN:** **Clause:**

Question:

Is it necessary that an adjustable rupture valve is provided with means allowing to safeguard the adjustment against unauthorised modification ?

Answer:

Yes. Rupture valves having a bigger range of use and needing an adjustment according to the special conditions of the lift in which they are installed, shall be provided with means to safeguard the adjustment against unauthorised modification. This can be done for instance by sealing.

At the EC-type examination it has to be considered that such safeguarding means are provided and can be used. The intended safeguarding means has to be mentioned in the certificate.

The correct adjustment and safeguarding is the responsibility of the manufacturer or the installer the latter following the adjustment instructions of the manufacturer.

History: 4th meeting of NB-L/HC, discussed and adopted in 6th NB-L/HC meeting, adopted by StC, editorially amended to new format of REC,

According to the "Rules of Procedure", clause 2.7, it is expected that Notified Bodies take recommendations into consideration

	NB-L **CO-ORDINATION OF NOTIFIED BODIES** **LIFTS DIRECTIVE** **95/16/EC**	**NB-L/REC 1/008** **version: 02** **date: 21.10.2013**

NB-L RECOMMENDATION FOR USE

Keywords: **UCM**		**Proposed by NB-L on 13.11.2012** **Approved by NB-L/HC on 13.11.2012** **Modified by NB-L/HC on**
		StC: to be endorsed **by WP X done on 16.8.2013** **by OP ☐ done on**
Related to Directive: 95/16/EC **Annex: , Clause:** **Annex:**	**Related to other directives:** **Annex: , Clause:**	**prEN/EN:** **Clause:**

Question:

The standard EN 81-1:1998 + A3: 2009 resp. EN 81-2:1998 + A3: 2009 has introduced a device for the protection of unintended car movement away from the landing with the landing door not in the locked position and the car door not in the closed position.

Which are the guidelines for a type-examination of a UCM-protection system according to 9.11 of EN 81-1:1998 + A3: 2009 and 9.13 of EN 81-2:1998 + A3: 2009?

Answer:

Because the list of safety components (annex IV of Directive 95/16/EC) does not contain UCM-protection systems, the type-examination certificate for UCM-protection system must not be an EC type-examination certificate. To avoid a misunderstanding this should be clearly written in the type-examination certificate according to EN 81-1:1998 + A3: 2009 and EN 81-2:1998 + A3: 2009.

In case of any deviation from 9.11 of EN 81-1:1998 + A3: 2009 respective 9.13 of EN 81-2:1998 + A3: 2009 it shall be declared, with reference to the chosen solution, that there has been achieved at least an equal safety level (in accordance with “ESR, annex I” of Lift Directive).

“UCM-protection systems” are complete systems according to EN 81-1: 1998 + A3: 2009 clause 9.11.2 and EN 81-2: 1998 + A3: 2009 clause 9.13.2 which are able to detect an unintended car movement and to cause the car to stop and to keep it stopped. UCM-protection systems shall be submitted to a type-examination in accordance with annex F.8 of EN 81-1/2: 1998 + A3: 2009.

“Subsystems” are either “detecting”, “activation“, or “stopping” systems. Every subsystem shall be submitted to a type-examination.
The type-examination of subsystems shall define interface conditions to the other subsystems (interfaces between “detecting”, “activation“, or “stopping” systems) and the relevant parameters.

For any particular safety component according Annex IV of the Lift Directive (e.g. safety gear, overspeed governor, rope-brake, safety valve) there may exist both, an EC type-examination certificate and a type-examination certificate, as a “subsystem” as part of the UCM-protection system according to 9.11 of EN 81-1:1998 + A3: 2009 respective 9.13 of EN 81-2:1998 + A3: 2009.

If necessary, an EC type-examination certificate of a safety component according to Annex IV of the Lift Directive may be incorporate a type-examination certificate for the component as subsystem of the UCM-protection system.

The existence of an EC type-examination certificate for a safety component according to Annex IV of the Lift Directive, without any reference to UCM-protection system and when used as a subsystem as part of the UCM-protection system according to 9.11 of EN 81-1:1998 + A3: 2009 respective 9.13 of EN 81-2:1998 + A3: 2009, does not automatically replace the type-examination certificate for the UCM-protection system.
In such cases the component shall be additionally tested and certified as a part of the UCM- protection system according to the requirements of 9.11 of EN 81-1:1998 + A3: 2009 respective 9.13 of EN 81-2:1998 + A3: 2009.
Therefore certificates covering both shall clearly specify which part of the EC type-examination is relating to Annex IV of the Lifts Directive and which part of type-examination is according to 9.11 of EN 81-1:1998 + A3: 2009 respective 9.13 of EN 81-2:1998 + A3: 2009.

In accordance with EN 81-1:1998 + A3: 2009 clause 9.11.6 respective EN 81-2: 1998 + A3: 2009 clause 9.13.6 when safety gears are used as stopping means in the down direction higher deceleration values than 1gn are allowed.

The UCM-protection system shall be designed taking into account the worst case failure.
Worst case is assumed to be the maximum output parameter (speed, torque, acceleration, pump output, etc.) for any load condition the drive system is capable to generate.
If it can be proved that any single failure in the drive system leads to less than the maximum output parameters, these lower parameters can be considered. In accordance with the ratified CEN text this can be considered as a movement from the standstill from the landing.

According EN 81-1: 1998 + A3: 2009 clause 9.11.3 and EN 81-2: 1998 + A3: 2009 clause 9.13.3 self-monitoring is required. Execution of the function by the control system is sufficient. E.g. monitoring of position of the brake levers/ pads, monitoring of braking torque or monitoring of the open or closed position of the hydraulic valves.

Loss of traction and the non-function of the brake, when the brake is EC-type tested and used as a subsystem of a UCM-protection system, are excluded potential failures in EN 81-1: 1998 + A3: 2009. While the uncontrolled movement away from the landing by slipping of the ropes on the traction sheave due to loss of traction is not considered, the traction and any slip of the rope must be considered when calculating the stopping distance in case of systems where the traction is necessary for the function of the stopping system.

In cases where a car door lock is used to fulfill 11.2.1 of EN 81-1/2:1998 + A3:2009, it should be considered that the distance between inner surface of the lift well and the sill can be more than 200 mm. In these cases the measures should be taken to reduce the distance to the required 200 mm (see Fig. 1).

The free vertical distance defined in the EN 81-1:1998 + A3:2009 and in EN 81-2: 1998 + A3: 2009 between the landing sill and the lowest part of the apron (inclined part) shall not exceed 200 mm, when the car is moving upwards (see Fig. 2). When the inclined part is longer than the minimum requirements, the possibility exists that the effective opening can be bigger. Independent from the point from which the distance is measured, it should be considered that it is not more than 200 mm.

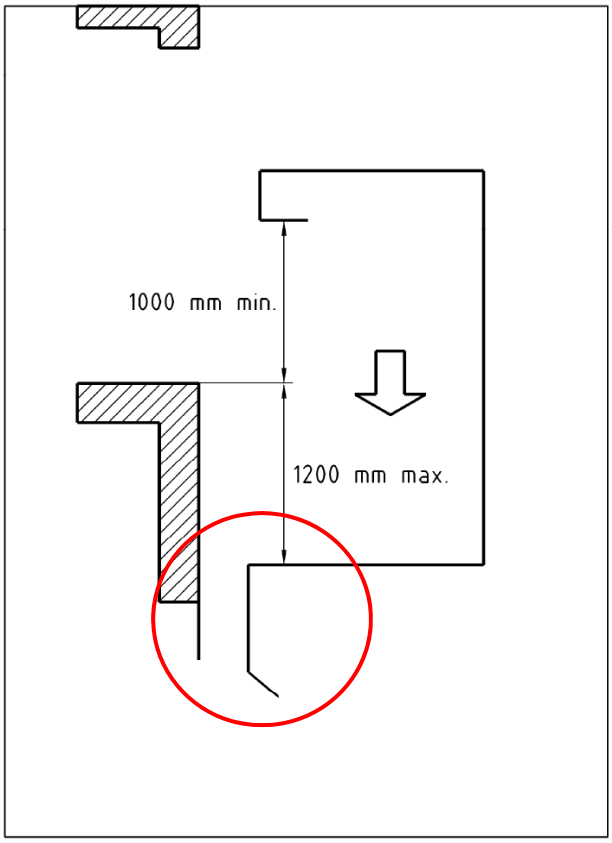


Fig. 1

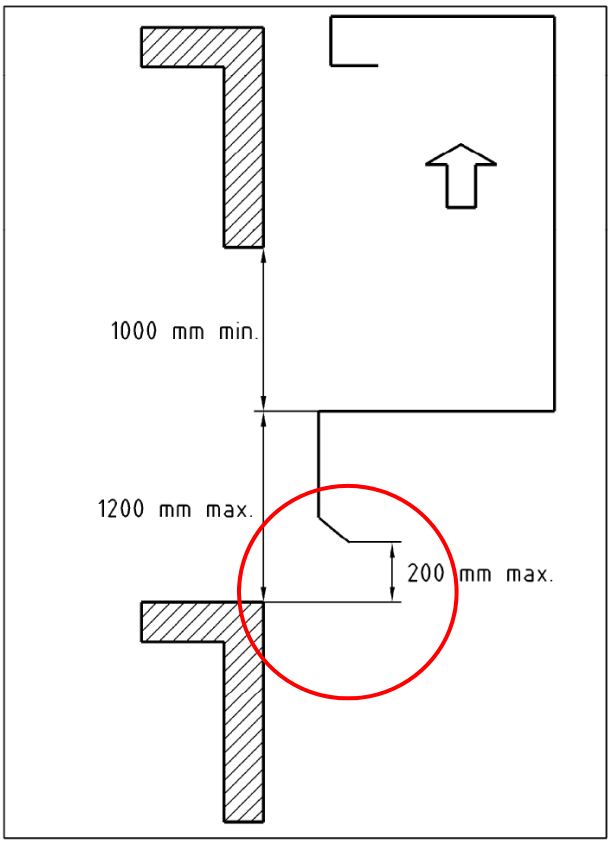


Fig. 2

Components for activation of the brake system may be considered as an independent part of the UCM-protection system which may not be included in the detection device (E.g. tripping means of speed governor). Therefore it is not necessary to consider these components for the assessment of the SIL for the detection device according to Table A.1 of annex A of the EN 81-1/2:1998 + A3:2009. However these devices shall be inherently safe and / or their functionality shall be monitored.

In analogy to EN 81-1/2:1998 + A3:2009 clause 14.1.2.6 the assessment of the SIL- classification ends at the power supply or signal to any downstream component.

Labelling of subsystems of UCM-protection system:

The EN 81-1/2:1998 + A3:2009 have not defined clear requirements regarding the labelling and identification of a UCM-protection system.

Therefore it is recommended that:

- A data plate shall be fixed on each subsystem of UCM-protection system indicating:
  a) the name of the manufacturer of the subsystem;
  b) the type-examination certificate number and its references;

- If a component is certified according to both, annex V A of the Lift Directive and UCM-protection system according to EN 81-1/2:1998 + A3:2009 shall be indicated and clearly separated on the label.

- For a certified UCM-protection system consisting of certified subsystems, the certificate for the UCM-protection system shall identify the certificate numbers of each subsystem but it is not necessary to indicate the certificate number of the UCM-protection system on each subsystem.

Answer continuation

Procedure for type-examination of subsystems and UCM-protection systems

The application of subsystems or UCM-protection systems has to consider possible relevant parameters:
e.g. load conditions (0-100%), car weight, total inertia (linear, rotating), nominal and worst case acceleration / speed, friction and driving forces (worst case), pump capacity, oil flow, pressure.

Note 1: EN 81-1/2:1998 + A3: 2009 clause 14.1.1 shall be respected
Note 2: If manufacturers do not follow these standards, an equal safety level must be proved

Subsystems

All relevant interfaces shall be defined consistently in order to enable combination of different subsystems. This may be for:

- Detecting systems: Responding behaviour (e.g. limit values of distances, detection time, speeds, accelerations etc., delay time, …).
- Activation systems: Responding behaviour (e.g. delay time, activation distances, maximum speed at activation, …)
- Stopping systems: Responding behaviour (e.g. delay time, tripping distances, retardation in activated position, maximum speed at reaction, nominal flow rate, nominal pressure, temperature, range of viscosity, braking force, braking torque, …)
- During type-examination the above mentioned parameters shall be verified and tested (the examples given above are examples, which means, that other parameters are essential for specific subsystems).

UCM-protection systems

The application of the UCM-protection system shall match with the lift system. Therefore all relevant parameters of the UCM-protection system respectively the parameters of the lift to fulfil the requirements shall be defined.

Procedure for UCM-protection systems

- The UCM-protection system shall not only work at the practical examination (test under laboratory conditions), but must also been checked in operational condition with verification of the values (the manufacturer's instructions for examinations and tests must be present at the type-examination).
- In order to avoid the following problem: Checking of the system at the installation, as intended by the manufacturer is not always possible, (e.g. in case of documentation not available / the maintenance company has no information if maintenance in meantime is done by another company). Therefore the documentation of the system, especially the instructions for examinations and tests, must be available at the installation.

- The following examinations are necessary:
  - Tests according EN 81-1/2: 1998 + A3: 2009 annex F.8
  - Verification on a complete lift (simulation of gear breakage failure or valve failure is normally not possible – therefore in such cases additional calculations and equivalent tests have to be performed)
  - Verification of the documentation: Calculation, user manual, instructions for examinations and tests, installation/maintenance instructions
- The manufacturer shall have a quality / functional safety management system

Procedure for production control

- Production control shall be performed for all subsystems and all UCM-protection systems not consisting of certified subsystems.
  In the test report it shall be recorded which documents/tests/features are needed for a random check (production control). The production control and random checks shall be performed by an equivalent procedure to that for safety components according to annex XI of Lift Directive 95/16/EC.
  The following items shall be verified (if applicable):
  - Verification of manufactured systems
  - Verification of the components which have been used
  - Verification of the applied materials
  - Verification of applied software
  - Verification of the quality documentation

Final conformity tests for UCM-protection systems

- In case of UCM-protection systems with type-examination:
  - Are the components supplied according to the scope of application and the conditions mentioned in the certificate?
  - Does the UCM-protection system, which is used, fit to the lift system (parameters according certificate)?
- In case of combination of subsystems to a UCM-protection system for a single lift installation: Are the subsystems suitable for combination with one another and with the lift system? The lift installer has to provide the documentation (e.g. calculation of the combined subsystems including delay times, distances, acceleration, retardation etc.) for the lift containing the proof of the correct combination of the applied subsystems with the complete lift to fulfil the requirements of EN 81-1: 1998 + A3: 2009 clause 9.11.3 and EN 81-2: 1998 + A3: 2009 clause 9.13.3.
- Verification of reference number(s)
- Verification of implemented software
- Functional test, (as a minimum, the tests according to the instructions for examinations and tests)
- Verification of the test result with the acceptance limits given by the installer / manufacturer (e.g. distances).

Answer continuation

Note 3: any necessary inspection shall be considered by the installer.

Content of the inspection shall be at least:

- Verification of reference number(s)
- Functional tests (as a minimum the tests according to the instructions for periodic examinations and tests)
- Verification of the test result with the acceptance limits given by the installer / manufacturer (e.g. distances).

Hystory: proposals of the NB L/AH SC group approved at the 30th NB-L meeting held in November 2012.

According to the "Rules of Procedure", clause 2.7, it is expected that Notified Bodies take recommendations into consideration

DN: L-REC-1-008

	NB-L **CO-ORDINATION OF NOTIFIED BODIES** **LIFTS DIRECTIVE** **95/16/EC**	**NB-L/REC 1 /010** **version: 05** **date: 29.01.2016**

NB-L RECOMMENDATION FOR USE

Keywords: **Acceptance of Reports and Certificates issued by installers or their subcontractors**		**Proposed by NB-L on 22.05.2013** **Approved by NB-L/HC on 13.11.2013** **Modified by NB-L/HC on 19.05.2015** **StC: to be endorsed** **by WP [x] done on 13.01.2016** **by OP done on**
Related to Directive: 95/16/EC **Annex: , Clause:** **Annex:**	**Related to other directives:** **Annex: , Clause:**	**prEN/EN:** **Clause:**

Question:

Under which conditions TYPE EXAMINATION CERTIFICATES for components can be accepted for the conformity assessment of lifts?

The TYPE EXAMINATION CERTIFICATES considered here are those according to the hamonised standards or on a voluntary basis.

Answer:

In general, four different types of Type Examination Certificates are possible:

1. Mandatory **EC** Type Examination Certificates for safety components acc. annex IV of European Directive for Lifts 95/16/EC.

2. Required by the standard Type Examination Certificates for (safety) components acc. EN81-1/2: 1998 + A3: 2009 (Annex F.8 for uncontrolled car movement protection means, …), EN81-21: 2009 + A1: 2012 Annex C (apron, pre-triggered stopping systems, …), …

3. Voluntary Type Examination Certificates for other components acc. harmonized EN81 standards (Fire rated landing doors acc. EN81-58, emergency communication systems acc. EN81- 28, …).

4. Voluntary Type Examination Certificates for other components with deviations to harmonized EN81 standards (PU-belts, …).

Mandatory **EC** TYPE EXAMINATION CERTIFICATES according to type 1 for components shall be accepted for the conformity assessment of lifts.

The acceptance of Type Examination Certificates for components is in the responsibility and decision of the Notified Body which is responsible for the assessment of the design conformity assessment of the lift.

Any material attest, material test report, declaration of compliance or similar documents as defined in EN81-1/2: 1998 + A3: 2009 Annex C.5, do not fall under this RfU.

Notified bodies are obliged by accreditation rules respectively by rules of conduct to proof the accreditation or the qualification of their sub-contractors, if results of any tests or calculations are used for the conformity assessment of the lift.

To enable a Notified Body to decide about the qualification of such a sub-contractor and therefore about the acceptance of a Type Examination Certificate for components, the following minimum requirements shall be met:

Minimum, general content of a Type Examination Certificate:

The examination certificate shall contain the following minimum information additional to any information which allows the identification of the component.

1 Name of the approved body
2 The wording “Type Examination Certificate”
3 Type Examination N°
4 Category, type and make or trade name
5 Manufacturer's name and address
6 Name and address of certificate holder
7 Date of submission for Type Examination
8 The requirements, on which the Type Examination Certificate has been issued
9 Test laboratory
10 Date and number of laboratory report
11 Date of Type Examination
12 A listing of all documents, which are annexed to the certificate (such annexed documents shall be marked with the Type Examination Certificate number)
13 Any additional information*
14 Place of issue
15 Date of issue

Technical content of a Type Examination Certificate:

The technical content of a Certificate shall precisely describe the component to enable the assessing body to verify its suitability for its application.

For example, for UCM components the technical content could be:

- Detection: Delay time, detection distance, -speed, -acceleration, …
- Tripping: Delay time, tripping distance, …
- Braking: Delay time, engaging distance, braking force, -torque, parts on which the braking element acts, …
- Complete systems: Scope of application in a lift installation as masses, balance, speed, other necessary interfaces to the lift

For example, for car door locking devices the technical content could be:

- the same requirements and tests, as they apply for landing door locks

For example, for fire rated landing doors the technical content could be:

- Conditions for door assembly and fixing
- Conditions of the interface between landing door and the building
- Conditions of ventilation (if any)

For example, for suspension, other than steel wire ropes acc EN81, the technical content could be:

- Material and minimum diameter of traction sheave
- Shape of groove(s)
- Minimum breaking load
- Technical characteristics
- Safety factor
- Maximum permissible number of bends over lifetime
- Discard criteria
- Environmental conditions
- Fire resistance
- Terminations
- Friction factor
- …

Language of Type Examination Certificates:
Certificates (including their annexes, if any) shall be drawn up in an official language of the Member State where the Notified Body is established or in a language acceptable to it.

Evaluation of qualification:
Laboratories can show their qualification by one of the following:

1. The laboratory is part of a Notified Body
2. The laboratory is an accredited laboratory (e.g. EN17025) for the required scope
3. The tests have been witnessed by the Notified Body (proper qualification of conducting staff, measuring equipment, procedures, …)

Note:
Any necessary production control, as a possible result from the certification of a component shall be considered but do not fall under this RfU.

Conclusion:

1. EC Type Examination Certificates, which are issued by a NB, shall be accepted.
2. Type Examination Certificates may be accepted considered, that all information, which is necessary for the proper application of the component has been made available and that the minimum general and technical content and the language of the issued Certificates and the evaluation of qualification of the laboratory are in conformance with the above specified content.

In all cases it remains in the Notified Bodies responsibility and decision to accept or reject a Type Examination Certificate.

History: introduced in the closed session of the 31st NB-L meeting in May 2013; approved at the 32nd NB-L meeting in November 2013; reconsidered at the 35th NB-L meeting further to the comments received.

According to the "Rules of Procedure", clause 2.7, it is expected that Notified Bodies take recommendations into consideration

DN: L-REC-1-010

NB-LIFT	**NB-L CO-ORDINATION OF NOTIFIED BODIES LIFTS DIRECTIVE 95/16/EC**	**NB-L/REC 1 /011 version: 03 date: 29.01.2016**

NB-L RECOMMENDATION FOR USE

Keywords: **Model lift, (safety) components, (EC)-type examination certificate, revision**		**Proposed by NB-L on 22.05.2013 Approved by NB-L/HC on 04.11.2014 Modified by NB-L/HC on 19.05.2015** **StC: to be endorsed by WP done on 13.01.2016 by OP done on**
Related to Directive: 95/16/EC Annex: V (a&b), Clause: -	**Related to other directives: 2014/33/EU Annex: IV (a&b), Clause:**	**prEN/EN: Clause:**

Question:

Is it possible to issue an EC-type examination certificate for a model lift specifying (EC)-type examination certificates of (safety) components, which will be revised after the date of issue of the EC-type examination certificate of the model lift?

Answer:

(Safety) components are commonly subject to revisions. These revisions may, depending on their impact and depending on the decision of the NB, result in

- revision of the existing
  or
- in the issue of new

(EC)-type examination certificates of the (safety) components.

Both above cases will lead to new (EC)-type examination certificate designations.
Because there is no legal basis to uniformly designate certificates, every NB has created its own system to designate certificates.

As a consequence, every certificate shall be designated in such a way to allow it to be easily and clearly identified as a unique certificate. This causes, that their revised or new (EC)-type examination certificate designations are not included in the EC-type examination certificate of a model lift.

To enable the application of EC-Type Examination Certificates for model lifts with implemented (safety) components which have been revised or newly introduced, then the EC-Type Examination Certificate for the model lift shall be reviewed, revised or reissued.

History: introduced at the 33rd NB-L meeting in May 2014; approved at the 34th NB-L meeting in Nov. 2014; reconsidered at the 35th NB-L meeting further to the comments received during the endorsement procedure.

According to the "Rules of Procedure", clause 2.7, it is expected that Notified Bodies take recommendations into consideration

DN: L-REC-1-011

NB-LIFT	**NB-L** **CO-ORDINATION OF NOTIFIED BODIES** **LIFTS DIRECTIVE** **95/16/EC**	**NB-L/REC 2/001** **version: 18** **date: 07.05.2014**

NB-L RECOMMENDATION FOR USE

Keywords: **Machinery Directive, ESR**		**Proposed by NB-L on 12.11.1998** **Approved by NB-L/HC on 23.05.2007** **Modified by NB-L/HC on 21.05.2013**
		StC: to be endorsed **by WP [X] done on 11.12.2013** **by OP done on**
Related to Directive: 95/16/EC **Annex: I , Clause: 1.1**	**Related to other directives:** **2006/42/EC, 98/37/EC** **Annex: I , Clause: -**	**prEN/EN: -** **Clause: -**

Question:

Which ESR's of the Machinery Directives 98/37/EC and 2006/42/EC must be considered in addition to those detailed within Annex I of Lift Directive?

Answer:

The ESR's of the Machinery Directive, which have to be taken into consideration, are detailed in the attached table.
(Note: The attached table does not change previous decisions of approved Rec for Use NB-L/REC 2/001 version 03 on applicability of Annex I in directive 98/37/EC)

History:
proposed by Technical Secretariat 1998-11-12, modified by NB-L/AH-MD 2007-02-01, modified by NB-L/AH-MD 2009-05-06; discussed again and approved at the 25th NB-L meeting held on 18-19 May 2010; updated according to the Machinery Directive 2006/42/EC and approved at the 27th NB-L meeting held on 17-18 May 2011; modified and then approved at the 29th NB-L meeting held on 22-23 May 2012 ; reconsidered by the NB-L/AH-MD group on the basis of the comments received during the endorsment and approved at the 31st NB-L meeting held on 21-22 May 2013

According to the "Rules of Procedure", clause 2.7, it is expected that Notified Bodies take recommendations into consideration

European Co-ordination of Notified Bodies for Lifts and their Safety Components
NB-L

Machinery Directives Essential Safety Requirements (ESR)

The ESR's of the Machinery Directives (98/37/EC & 2006/42/EC) which have to be taken into consideration in addition to those listed within Annex I of the Lifts Directive are detailed in the table below.

The table lists the clauses from both Machinery Directives and whether they are considered applicable or not. It is recognised that the requirements of 2006/42/EC will not become mandatory until 29 December 2009, however, considering development and installation lead times, compliance with the new requirements will need to be taken into account in advance of this date.

It must be remembered that application of the Machinery Directive ESR's in addition to those from the Lifts Directive is required where the specific hazard is considered to exist and is not covered by Annex I of the Lift Directive.

MD 98/37/EC Annex I, clause	**MD 2006/42/EC Annex I, clause**	**Applicable Yes/No**	**Reason**
Prel. Observ	GENERAL PRINCIPLES	no	similar with the Preliminary Remarks of annex I of the LD
1.1.1	1.1.1	yes	the defined terms are not used in the LD, but are necessary for the understanding of the ESR of the MD
1.1.2	1.1.2	yes	see LD, Annex I, 1.1
1.1.3	1.1.3	yes	not mentioned in LD Annex I
1.1.4	1.1.4	yes	only lighting of the car mentioned in LD Annex I. Machine room, well and other spaces particular to the lift need also illumination
1.1.5	1.1.5	yes	not mentioned in LD Annex I
1.1.2 d	1.1.6	yes	not mentioned in LD Annex I, relevant for maintenance and adjustment work
	1.1.7	no	not relevant
	1.1.8	no	not relevant
1.2.1	1.2.1	yes	see LD, Annex I, 1.6.4,
1.2.2	1.2.2	yes	LD Annex I, 1.6.1, 1.6.2 and 1.6.3 deals only with the controls for the user. Controls for maintenance/rescue personnel located in the well or machine room have to comply with the relevant requirements

MD 98/37/EC Annex I, clause	**MD 2006/42/EC Annex I, clause**	**Applicable Yes/No**	**Reason**	
Prel. Observ	GENERAL PRINCIPLES	no	similar with the Preliminary Remarks of annex I of the LD	
1.2.3	1.2.3	yes	see LD, Annex I, 1.6.4	Note:
1.2.4	1.2.4	yes	see LD, Annex I, 1.6.4	1.6.4 incorporates the ESR of 1.2.3, 1.2.4, 1.2.5 and 1.2.6 if it is understood as in the present state of the art
1.2.5	1.2.5	yes	see LD, Annex I, 1.6.4	
1.2.6	1.2.6	yes	see LD, Annex I, 1.6.4	
1.2.7	1.2.1	yes	see LD, Annex I, 1.6.4	
1.2.8	1.1.6	yes	relevant for maintenance and adjustment work	
1.3.1	1.3.1	yes	for complete lifts part of the exchange of information according to LD, art. 2 (2)	
1.3.2	1.3.2	yes	LD Annex I, 1.2 and 1.3 deals only with the car and suspension elements. Other parts of the lift need also to be designed to withstand the loads and forces imposed on them.	
1.3.3	1.3.3	yes	relevant in case of installation, maintenance, repair and dismantling	
1.3.4	1.3.4	yes	LD Annex I, 4.1 deals only with the hazards related to the movements of landing doors. Car doors or parts in need of maintenance, adjustment or inspection are not mentioned.	
1.3.5	1.3.5	no	not relevant	
1.3.6	1.3.6	no	not relevant	
1.3.7	1.3.7	yes	in addition to LD, Annex I, 2.1, 2.2, 2.3, 3.1, 3.2, 3.3, 3.4, 4.1 and 4.3	
1.3.8 A	1.3.8.1	yes	in addition to LD, Annex I, 2.1, 2.2, 2.3, 3.1, 3.2, 3.3, 3.4, 4.1 and 4.3	
1.3.8 B	1.3.8.2	yes	in addition to LD, Annex I, 2.1, 2.2, 2.3, 3.1, 3.2, 3.3, 3.4, 4.1 and 4.3	
	1.3.9	no	see also MD Annex I, 6.4.1, and also LD 3.2	
1.4.	1.4	yes	in addition to LD, Annex I, 2.1, 2.2, 2.3, 3.1, 3.2, 3.3, 3.4, 4.1 and 4.3	
1.5.1	1.5.1	no	See LD, Annex I, 1.6.4 in combination with the Guide of the Lift Directive §32 & §95: Electrical equipment of a lift must be as safe as any other electrical equipment of any machine. So the safety objectives of the LVD apply also to lifts.	
1.5.2	1.5.2	yes	Relevant in conjunction with use of new materials,	
1.5.3	1.5.3	yes	sometimes combustion engines are used	
1.5.4	1.5.4	yes	e. g. plug in connections of electric wiring	
1.5.5	1.5.5	yes	LD, Annex I, 4.6 is not covering hot components	
1.5.6	1.5.6	yes	e. g. overloading electrical equipment	
1.5.7	1.5.7	yes	e. g. lifts in explosive atmosphere	
1.5.8	1.5.8	yes	under normal operating conditions lifts do not create dangerous noise,	
1.5.9	1.5.9	yes	under normal operating conditions lifts do not create dangerous vibrations,	
1.5.10	1.5.10	yes	relevant, if special equipment is used	
1.5.11	1.5.11	yes	Precautions according EMC Directive are not covering all kind of radiation which can influence electric safety circuits with electronic components	
1.5.12	1.5.12	yes	probably during installation or as protecting device	
1.5.13	1.5.13	yes	e. g. batteries for emergency supply	
1.5.14	1.5.14	yes	in addition to LD, Annex I, 4.4 and 4.5	

MD 98/37/EC Annex I, clause	**MD 2006/42/EC Annex I, clause**	**Applicable Yes/No**	**Reason**
Prel. Observ	GENERAL PRINCIPLES	no	similar with the Preliminary Remarks of annex I of the LD
1.5.15	1.5.15	yes	not only inside the car, but also in the machine room, on car roof, in the pit; relevant also for landing inaccuracy
4.1.2.8	1.5.16	no	There is no difference, if a lift is installed inside a structure or as a inclined lift outside. The installer of the structure is responsible for the lightning protection. If the installer of the lift is at the same time the installer of the structure, he is responsible for the lightning protection.
1.6.1	1.6.1	yes	not mentioned in LD Annex I
1.6.2	1.6.2	yes	not mentioned in LD Annex I
1.6.3	1.6.3	no	see LD, Annex I, 1.6.4
1.6.4	1.6.4	yes	LD, Annex I, 4.4 deals only with rescue operations. Maintenance etc. is not addressed
1.6.5	1.6.5	yes	especially for lifts with glass as well enclosure and/or car walls
New	1.7.1	yes	
1.7.0	1.7.1.1	no	see LD, Annex I, 1.6.2, 5.1 and 5.2
1.7.1	1.7.1.2	yes	e. g. on car roof, on machine, etc.
1.7.2	1.7.2	yes	e. g. on electrical equipment
1.7.3	1.7.3	yes	see LD, Annex I, 5.1
1.7.4	1.7.4	no	see LD, Annex I, 6.1 and 6.2
1.7.4, d	1.7.4.3	no	Note: 1.7.4.3 is not applicable for conformity assessment procedure under LD, but manufacturers are obliged to comply.
2	2	no	not relevant
3	3	no	not relevant
4.1.1	4.1.1	yes	the defined terms are not used in the LD, but are necessary for the understanding of the ESR of the MD
4.1.2.1	4.1.2.1	yes	part of the exchange of information according to LD, art. 2 (2), see also 1.3.1
4.1.2.2	4.1.2.2	yes	not mentioned in LD Annex I
4.1.2.3	4.1.2.3	yes	in combination with clause 1.1.3 and 1.3.2
4.1.2.4	4.1.2.4	yes	regarding the relation between the diameter of ropes and pulleys/sheaves or drums
4.1.2.5	4.1.2.5	no	not relevant, see 1.3 LD
4.1.2.6	4.1.2.6	yes	buffers under the counterweights are not mentioned in the LD
4.1.2.7	4.1.2.7	no	See LD, Annex I, 4.3 and 2.1
4.1.2.8	1.5.16	yes	relevant according to building regulations or for lifts outside of buildings
New	4.1.2.8	yes	only 4.1.2.8.2 is additional to ANNEX I of LD
	4.1.3	no	covered by the Conformity Assessment Procedures
4.2.1.1	1.1.7	no	
4.2.1.2	1.1.8	no	not relevant
4.2.1.3	4.2.1	yes	except for second sentence: hold-to-run-controls are relevant for rescue and maintenance
4.2.1.4	4.2.2	no	see LD Annex I, 1.4.1
4.2.2	4.2.3	no	not relevant
4.2.3	4.1.2.7	no	see LD Annex I, 2.1, 2.2, 3.1 and 4.1
New	4.1.2.8.2	yes	additional to LD 3.4 and 2.3

MD 98/37/EC Annex I, clause	**MD 2006/42/EC Annex I, clause**	**Applicable Yes/No**	**Reason**
Prel. Observ	GENERAL PRINCIPLES	no	similar with the Preliminary Remarks of annex I of the LD
4.2.4	4.1.3	no	covered by the Conformity Assessment Procedures
4.3.1	4.3.1	yes	relevant information is part of the documentation, see LD Annex I,
4.3.2	4.3.2	no	see LD Annex I, 5.1
4.3.3	4.3.3	no	see LD Annex I, 5.1
4.4.1	4.4.1	no	not relevant
4.4.2	4.4.2	no	see LD Annex I, 6.2
5	5	no	not relevant
6.1.1	4.1.1 (g)	yes	the defined terms are not used in the LD, but are necessary for the understanding of the ESR of the MD
6.1.2	6.1.1	no	see LD Annex I, 1.3
6.1.3	6.1.2	no	see LD Annex I, 1.4.1
	6.2	no	e. g. inspection control on the car roof
6.2.1		yes	e. g. inspection control on the car roof
6.2.2		no	not relevant
6.2.3	6.3.1	no	covered by LD Annex I, 3.2.
6.3	6.3.2	yes	
	6.3.3	no	It is relevant for lifting platforms and not for lift with closed cars
6.4.1		no	see LD Annex I, 1.4.3 and 3.2
new	6.4.1	no	See also MD Annex I, 4.1.2.8.3 (Risks due to contact with the moving carrier) and LD Annex I, 3 and 2
6.4.2	6.3.1	yes	Additional to LD Annex I, 1.4.2, 1.4.3, 1.4.4, 3.2 and 3.3
	6.4.2	no	
new	6.4.3	no	See LD Annex I, 1.2, 2.1, 2.3, 3.1
6.5	6.5	no	see LD Annex I, 5.1

MD 2006/42/EC Annex I, clause	**MD 98/37/EC Annex I, clause**	**Applicable Yes/No**	**Reason**
GENERAL PRINCIPLES	Prel. Observ	no	similar with the Preliminary Remarks of annex I of the LD
1.1.1	1.1.1	yes	the defined terms are not used in the LD, but are necessary for the understanding of the ESR of the MD
1.1.2	1.1.2	yes	see LD, Annex I, 1.1
1.1.3	1.1.3	yes	not mentioned in LD Annex I
1.1.4	1.1.4	yes	only lighting of the car mentioned in LD Annex I. Machine room, well and other spaces particular to the lift need also illumination
1.1.5	1.1.5	yes	not mentioned in LD Annex I
1.1.6	1.1.2 d	yes	not mentioned in LD Annex I, relevant for maintenance and adjustment work
1.1.6	1.2.8	yes	relevant for maintenance and adjustment work
1.1.7		no	not relevant
1.1.7	4.2.1.1	no	
1.1.8		no	not relevant
1.1.8	4.2.1.2	no	not relevant
1.2.1	1.2.1	yes	see LD, Annex I, 1.6.4,
1.2.1	1.2.7	yes	see LD, Annex I, 1.6.4
1.2.2	1.2.2	yes	LD Annex I, 1.6.1, 1.6.2 and 1.6.3 deals only with the controls for the user. Controls for maintenance/rescue personnel located in the well or machine room have to comply with the relevant requirements
1.2.3	1.2.3	yes	see LD, Annex I, 1.6.4
1.2.4	1.2.4	yes	see LD, Annex I, 1.6.4
1.2.5	1.2.5	yes	see LD, Annex I, 1.6.4
1.2.6	1.2.6	yes	see LD, Annex I, 1.6.4
			Note: 1.6.4 incorporates the ESR of 1.2.3, 1.2.4, 1.2.5 and 1.2.6 if it is understood as in the present state of the art
1.3.1	1.3.1	yes	for complete lifts part of the exchange of information according to LD, art. 2 (2)
1.3.2	1.3.2	yes	LD Annex I, 1.2 and 1.3 deals only with the car and suspension elements. Other parts of the lift need also to be designed to withstand the loads and forces imposed on them.
1.3.3	1.3.3	yes	relevant in case of installation, maintenance, repair and dismantling
1.3.4	1.3.4	yes	LD Annex I, 4.1 deals only with the hazards related to the movements of landing doors. Car doors or parts in need of maintenance, adjustment or inspection are not mentioned.
1.3.5	1.3.5	no	not relevant
1.3.6	1.3.6	no	not relevant
1.3.7	1.3.7	yes	in addition to LD, Annex I, 2.1, 2.2, 2.3, 3.1, 3.2, 3.3, 3.4, 4.1 and 4.3
1.3.8.1	1.3.8 A	yes	in addition to LD, Annex I, 2.1, 2.2, 2.3, 3.1, 3.2, 3.3, 3.4, 4.1 and 4.3
1.3.8.2	1.3.8 B	yes	in addition to LD, Annex I, 2.1, 2.2, 2.3, 3.1, 3.2, 3.3, 3.4, 4.1 and 4.3
1.3.9		no	see also MD Annex I, 6.4.1, and also LD 3.2
1.4	1.4.	yes	in addition to LD, Annex I, 2.1, 2.2, 2.3, 3.1, 3.2, 3.3, 3.4, 4.1 and 4.3
1.5.1	1.5.1	no	See LD, Annex I, 1.6.4 in combination with the Guide of the Lift Directive §32 & §95: Electrical equipment of a lift must be as safe as any other electrical equipment of any machine. So the safety objectives of the LVD apply also to lifts.
1.5.2	1.5.2	yes	Relevant in conjunction with use of new materials,

MD 2006/42/EC Annex I, clause	**MD 98/37/EC Annex I, clause**	**Applicable Yes/No**	**Reason**
GENERAL PRINCIPLES	Prel. Observ	no	similar with the Preliminary Remarks of annex I of the LD
1.5.3	1.5.3	yes	sometimes combustion engines are used
1.5.4	1.5.4	yes	e. g. plug in connections of electric wiring
1.5.5	1.5.5	yes	LD, Annex I, 4.6 is not covering hot components
1.5.6	1.5.6	yes	e. g. overloading electrical equipment
1.5.7	1.5.7	yes	e. g. lifts in explosive atmosphere
1.5.8	1.5.8	yes	under normal operating conditions lifts do not create dangerous noise,
1.5.9	1.5.9	yes	under normal operating conditions lifts do not create dangerous vibrations,
1.5.10	1.5.10	yes	relevant, if special equipment is used
1.5.11	1.5.11	yes	Precautions according EMC Directive are not covering all kind of radiation which can influence electric safety circuits with electronic components
1.5.12	1.5.12	yes	probably during installation or as protecting device
1.5.13	1.5.13	yes	e. g. batteries for emergency supply
1.5.14	1.5.14	yes	in addition to LD, Annex I, 4.4 and 4.5
1.5.15	1.5.15	yes	not only inside the car, but also in the machine room, on car roof, in the pit; relevant also for landing inaccuracy
1.5.16	4.1.2.8	no	There is no difference, if a lift is installed inside a structure or as a inclined lift outside. The installer of the structure is responsible for the lightning protection. If the installer of the lift is at the same time the installer of the structure, he is responsible for the lightning protection.
1.5.16	4.1.2.8	yes	relevant according to building regulations or for lifts outside of buildings
1.6.1	1.6.1	yes	not mentioned in LD Annex I
1.6.2	1.6.2	yes	not mentioned in LD Annex I
1.6.3	1.6.3	no	see LD, Annex I, 1.6.4
1.6.4	1.6.4	yes	LD, Annex I, 4.4 deals only with rescue operations. Maintenance etc. is not addressed
1.6.5	1.6.5	yes	especially for lifts with glass as well enclosure and/or car walls
1.7.1	New	yes	
1.7.1.1	1.7.0	no	see LD, Annex I, 1.6.2, 5.1 and 5.2
1.7.1.2	1.7.1	yes	e. g. on car roof, on machine, etc.
1.7.2	1.7.2	yes	e. g. on electrical equipment
1.7.3	1.7.3	yes	see LD, Annex I, 5.1
1.7.4	1.7.4	no	see LD, Annex I, 6.1 and 6.2
1.7.4.3	1.7.4, d	no	Note: 1.7.4.3 is not applicable for conformity assessment procedure under LD, but manufacturers are obliged to comply.
2	2	no	not relevant
3	3	no	not relevant
4.1.1	4.1.1	yes	the defined terms are not used in the LD, but are necessary for the understanding of the ESR of the MD
4.1.1 (g)	6.1.1	yes	the defined terms are not used in the LD, but are necessary for the understanding of the ESR of the MD

MD 2006/42/EC Annex I, clause	**MD 98/37/EC Annex I, clause**	**Applicable Yes/No**	**Reason**
GENERAL PRINCIPLES	Prel. Observ	no	similar with the Preliminary Remarks of annex I of the LD
4.1.2.1	4.1.2.1	yes	part of the exchange of information according to LD, art. 2 (2), see also 1.3.1
4.1.2.2	4.1.2.2	yes	not mentioned in LD Annex I
4.1.2.3	4.1.2.3	yes	in combination with clause 1.1.3 and 1.3.2
4.1.2.4	4.1.2.4	yes	regarding the relation between the diameter of ropes and pulleys/sheaves or drums
4.1.2.5	4.1.2.5	no	not relevant, see 1.3.7
4.1.2.6	4.1.2.6	yes	buffers under the counterweights are not mentioned in the LD
4.1.2.7	4.1.2.7	no	See LD, Annex I, 4.3 and 2.1
4.1.2.8	New	yes	only 4.1.2.8.2 is additional to LD
4.1.3		no	covered by the Conformity Assessment Procedures
4.2.1	4.2.1.3	yes	except for second sentence: hold-to-run-controls are relevant for rescue and maintenance
4.2.2	4.2.1.4	no	see LD Annex I, 1.4.1
4.2.3	4.2.2	no	not relevant
4.1.2.7	4.2.3	no	see LD Annex I, 2.1, 2.2, 3.1 and 4.1
4.1.2.8.2	New	yes	additional to LD 3.4 and 2.3
4.1.3	4.2.4	no	covered by the Conformity Assessment Procedures
4.3.1	4.3.1	yes	relevant information is part of the documentation, see LD Annex I,
4.3.2	4.3.2	no	see LD Annex I, 5.1
4.3.3	4.3.3	no	see LD Annex I, 5.1
4.4.1	4.4.1	no	not relevant
4.4.2	4.4.2	no	see LD Annex I, 6.2
5	5	no	not relevant
6.1.1	6.1.2	no	see LD Annex I, 1.3
6.1.2	6.1.3	no	see LD Annex I, 1.4.1
6.2		no	not relevant
	6.2.1	yes	e. g. inspection control on the car roof
	6.2.2	no	not relevant
6.3.1	6.2.3	no	covered by LD Annex I, 3.2.
6.3.1	6.4.2	yes	Additional to LD Annex I, 1.4.2, 1.4.3, 1.4.4, 3.2 and 3.3
6.3.2	6.3	yes	
6.3.3		no	It is relevant for lifting platforms and not for lift with closed cars
	6.4.1	no	see LD Annex I, 1.4.3 and 3.2
6.4.1	new	no	See also MD Annex I, 4.1.2.8.3 (Risks due to contact with the moving carrier) and LD Annex I, 3 and 2
6.4.2		no	
6.4.3	new	no	See LD Annex I, 1.2, 2.1, 2.3, 3.1
6.5	6.5	no	see LD Annex I, 5.1

Based on the following document:

Guide to application of the Machinery Directive 2006/42/EC

NB-LIFT	**NB-L CO-ORDINATION OF NOTIFIED BODIES LIFTS DIRECTIVE 95/16/EC**	**NB-L/REC 2/002 version: 06 date: 07-05-03**

NB-L RECOMMENDATION FOR USE

Keywords: **Lifts, ESR, Stopping accuracy, CAP,**	**Proposed by NB-L on 97-10-07, Decided by NB-L/HC on 00-01-19, Modified by NB-L/HC on** **StC: to be approved by WP X done on 07-04-23 by OP done on -**
related to Directive: 95/16/EC **Article: 3 Annex: I, 1.1 Clause:**	**prEN/EN:** **Clause:**

Question:

Does stopping accuracy of lifts belong to the Essential Safety Requirements (ESR) of the Lifts Directive?

Answer:

Yes. According to Annex I, 1.1 of the Lifts Directive the ESR of the Machinery Directive also apply where the relevant hazard exists and is not dealt with in Annex I of the Lifts Directive.
The necessity of a certain stopping accuracy is related to clause 1.5.15 of Annex I of the Machinery Directive (avoidance of risks of tripping).
The following shall be taken into consideration:

- Stopping accuracy is a structural condition and has to be observed during CAP;
- Manufacturers should aim for the highest level of stopping accuracy possible;
- Stopping accuracy has to take 2 different items into consideration
  - accuracy of stopping at a landing (stopping)
  - variations of the car position in a landing when stopped due to loading and unloading (re-levelling)
    (It is considered acceptable that during loading and unloading of a heavy load in the case of lifts with high capacity the reaction of the levelling-means allows the step between car-floor and landing-to exceed the normal value as it is not expected that any disabled person transits through the car-entrance during these loading and unloading operations)
- Defined values are published in EN 81-70:2003, clause 5.3.3, 'Stopping and Levelling accuracy';
- In assessing stopping and levelling accuracy both, the layout of the specific installation and operational factors (hospital, residential building, factory, etc.) shall be taken into account;
- The stopping accuracy is part of the exchange of information between the installer of the lift and the persons responsible for the building according to Art. 2 (2);
- The technical means of the installation shall be such as to meet the degree of stopping accuracy agreed by the installer and the persons responsible for the building.
- The value of stopping accuracy agreed by the installer and the persons responsible for the building shall be referenced in the instruction manual according to Annex I, 6.2.

In the meantime a CEN/TC10-interpretation 578 has been developed to clarify the missing subject on stopping/levelling accuracy in EN 81-1/2:1998, Electric- and Hydraulic Lifts.

History: Discussion in NB-L/HC, 2nd meeting, adopted in 6th NB-L/HC meeting, adopted by StC, editorially amended to new format of REC

According to the "Rules of Procedure", clause 2.7, it is expected that Notified Bodies take recommendations into consideration

NB-LIFT	**NB-L COORDINATION GROUP OF NOTIFIED BODIES FOR LIFTS 2014/33/EU**	**NB-L/REC 2/003 Version: 05 Date: 13.09.2016**

RECOMMENDATION FOR USE

Keywords: **Lifts, EMC-Directive, CAP**		**Proposed by NB-L on 18.11.2015** **Approved by NB-L on 18.11.2015** **Endorsed by Lifts Working Group on 30.06.2016**
Related to Directive: **2014/33/EU** **Annex/Clause:** **Article 1, point 3**	**Related to other directives:** **Annex/Clause:**	**EN/prEN:** **Annex/Clause:**

Question:

Do lifts have to comply with the EMC-Directive?

Answer:

Yes. The safe use of lifts depends to quite an extent from unobjectionable functioning of electrical equipment. These equipment can be disturbed by electromagnetic influences. In that respect not only perturbing radiation but also effective radiation e. g. from mobile phones have to be taken into consideration.
Not all of the possible perturbing radiation are covered by the EMC-Directive.
During CAP NB have to prove that electromagnetic radiation does not affect the safe operation of the lift.
The fact that the Lifts and EMC Directives have equal legal force does not allow any restrictions to the installer´s choice regarding the order in which he carries out the CAPs of the individual directives. Given the close links between protection from interference and the safe operation of the lift in case of lift controls which are sensitive to interference, the installer is nonetheless well-advised to carry out the necessary checks as close together as possible or to ensure close co-operation between the different NB.

History:

Discussed at the 2nd NB-L meeting, adopted at the 6th NB-L meeting, endorsed by the StC.

Amended according to Directive 2014/33/EU at the 36th NB-L meeting, endorsed by the LWG on 30 June 2016.

According to the "Rules of Procedure", clause 2.7, it is expected that Notified Bodies take recommendations into consideration. Recommendations for Use, which have been endorsed by the Lifts Working Group become decisions according to 2014/33/EU, Article 24 (11).
It is in the responsibility of the user of this document, that its latest version is used.

	NB-L **CO-ORDINATION OF NOTIFIED BODIES** **LIFTS DIRECTIVE** **95/16/EC**	**NB-L/REC 2/004** **version: 03** **date: 01-07-04**

NB-L RECOMMENDATION FOR USE

Keywords: **NB, Lift, CE-marking, identification number**	**Proposed by NB-L on 98-11-12,** **Decided by NB-L/HC on 98-11-12,** **Modified by NB-L/HC on**
	StC: to be approved **by WP X done on 00-12-31** **by OP ☐ done on**
related to Directive: 95/16/EC **Article: 10 Annex: III Clause:**	**prEN/EN:** **Clause:**

Question:

Which identification number of a NB shall follow the CE-marking of a lift ?

Answer:

The identification number of the NB to be added to the CE-marking of a lift can be taken from the following table

Conformity assessment procedure according to Article 8 (2), item	CE-marking followed by the identification number of the
i, ii,iii	NB having made the final inspection (Annex VI) or NB having approved a system (Annex XII, XIII or XIV)
iv	NB having made the unit verification (Annex X)
v	NB having approved a system (Annex XIII)

History: Discussion and adoption in NB-L/HC, 4th meeting, adoption by StC, editorially amended to new format of REC,

According to the "Rules of Procedure", clause 2.7, it is expected that Notified Bodies take recommendations into consideration

	NB-L **CO-ORDINATION OF NOTIFIED BODIES** **LIFTS DIRECTIVE** **95/16/EC**	**NB-L/REC 2/005** **version: 07** **date: 17-09-2007**

NB-L RECOMMENDATION FOR USE

Keywords: CAP, Brake, test	**Proposed by NB-L/HC on 1998,** **Decided by NB-L/HC on 2000-01-19** **Modified by NB-L/HC on 23-05-2007**
	StC: to be approved **by WP X done on 07.09.13** **by OP ☐ done on**
related to Directive: 95/16/EC **Article: 8 (2) Annex: VI, X Clause: -**	**prEN/EN: 12.4.2.1, Annex D** **Clause: -**

Question:

What shall be demonstrated with the test of the brake of an electric lift ?

Answer:

The answer is considered to be fully described in CEN interpretation n. 560 (L-REC-2-005 ANNEX).

Comments

- The main purpose of the overload test is to ensure the hoist brake is effective.
- The manufacturer shall make available information how the brake fulfils the requirements of clause 12.4 of EN81.1 and shall provide instructions showing how the tests may be performed in a proper way, this must also include instructions for testing with one brake-half, to avoid different interpretations on the result.
- If the deceleration is considered excessive, by observation, then this should be measured utilising an accelerometer or similar device.

History: discussed in the 5th NB-L/HC meeting, adopted in the 6th NB-L/HC meeting, approved by the StC, discussed again and modified in the 9th NB-L/HC meeting, editorially amended to new format of REC. Discussed and approved at the 19th NB-L/HC meeting.

According to the "Rules of Procedure", clause 2.7, it is expected that Notified Bodies take recommendations into consideration

	NB-L **CO-ORDINATION OF NOTIFIED BODIES** **LIFTS DIRECTIVE** **95/16/EC**	**NB-L/REC 2/007** **version: 05** **date: 01-07-04**

DRAFT

NB-L RECOMMENDATION FOR USE

Keywords: **CAP, Lift, Model lift, Certificate**	**Proposed by NB-L on 97-10-07,** **Decided by NB-L/HC on 00-01-19,** **Modified by NB-L/HC on 00-05-23**
	StC: to be approved **by WP ☐ done on** **by OP X done on 00-06-05**
related to Directive: 95/16/EC **Article: 1 (4) Annex: V (B) Clause:**	**prEN/EN:** **Clause:**

Question:

Which elements have to be mentioned in the certificate of a lift/model lift in order to give a clear information about the range of the EC-type examinations and the possible modifications.

Answer:

The necessary details are given in the enclosed document NB-L/029/98

History: discussed in 2nd, 3rd, 4th and 5th NB-L/HC meeting, adopted in 6th NB-L/HC meeting; editorial modification on 00-05-23, adopted by StC, editorially amended to new format of REC,

According to the "Rules of Procedure", clause 2.7, it is expected that Notified Bodies take recommendations into consideration

DOC	NB-L	029	98

A MODEL LIFT

WITHIN THE TERMS OF THE LIFTS DIRECTIVE 95/16/EC

DN:GAREIS/EA_AUFZ/NB_L/CAPMODL1.DOC

MODEL LIFT CRITERIA

Article 1.4 of Directive 95/16/EC states:-

> *„A 'model lift' shall mean a representative lift whose technical dossier shows the way in which the essential safety requirements will be met for lifts which conform to the model lift as defined by objective parameters and which uses identical safety components.*
>
> *All permitted variations between the model lift and the lifts forming part of the lifts derived from the model lift must be clearly specified (with maximum and minimum values) in the technical dossier.*
>
> *By calculation and/or on the basis of design plans it is permitted to demonstrate the similarity of a range of equipment to satisfy the essential requirements."*

The objective of these proposals is, through type-examination and the setting down of pre-determined criteria, to demonstrate the similarity of a range of equipment and thereby reduce the extent of testing necessary to satisfy the essential health and safety requirements within the Directive.

The 'model lift' concept recognises that individual components and assemblies may cover a range of applications. The objective is therefore to avoid the need for every combination within any one series of lifts having to be subjected to separate test and examination where, within a set of prescribed parameters, one test is sufficient.

In these circumstances it should not be necessary to submit every variant for type-examination. By submitting what might be the 'worst' case this should provide adequately for a range of equipment.

Type-examination involves the testing of a lift in-situ by a notified body where the safety components will have undergone separate type-testing in accordance with the appropriate harmonised standard. In addition, the lift manufacturer will have provided detailed design criteria and relevant information as contained within the technical dossier to enable the notified body to judge compliance for a range of equipment within agreed performance criteria.

The proposed criteria for the 'model lift' has been structured to allow, within a range, the setting of specified limits, at the same time recognising that within such a range the components need not be obtained from a single source in order to satisfy the prescribed criteria. Accompanying the tables are notes to illustrate the general objectives.

1.0	**Technical Data - General**	Range	
		Minimum	Maximum
1.1	Range of Rated Load	X	X
1.2	Range of Suspended Load	X	X
1.3	Range of Rated Speed	X	X
1.4	Range of Travel	X	X
1.5	Mass of Car	X	X
1.6	Type of Drive System		
1.7	Location of Drive System		
1.8	Entrance Configuration		

2.0 Technical Data - Safety Components (Showing Dual Sourcing Alternatives A/B)

2.1 Locking Devices
(According to Entrance Configuration - See 1.8 above)

		Certificate Source A	Certificate Source B
	Type 1	X	X
	Type 2	X	X
2.2	Safety Gear		
	Type 1	X	X
	Type 2	X	X
2.3	Ascending Car Overspeed Protection		
	Type 1	X	X
	Type 2	X	X
2.4	Overspeed Governor		
	Type 1	X	X
	Type 2	X	X

		Certificate Source A	Certificate Source B
2.5	Buffers		
	Type 1	X	X
	Type 2	X	X
2.6	Hydraulic Valves		
	Type 1	X	X
	Type 2	X	X
2.7	Electronic Safety Devices		
	Type 1	X	X
	Type 2	X	X
	Type 3	X	X
	Type 4	X	X

3.0 Technical Data - Other Components

3.1 Suspension Ropes (Construction/Certification)

3.2 Guiderails (Type/Max Span)

3.3 Compensation (Type)

3.4 Doors (Manual/Power Operated)

3.5 Door Drive System

3.6 Suspension Configuration (Means of Suspension/Support)

3.7 Car (Type of Construction/Dimensions)

3.8 Machine

4.0 Drawings

To include headroom, pit depth, machine room loading, pit loading, well loading/stress and all information to enable the lift to be incorporated in the building. Safety circuit schematic diagram.

5.0 Documentation

5.1 Type-examination Certificates

Specific Exclusions

Traction Calculations

Guide Rail Calculations

Instruction Manual

Compliance with E.S.R.s

Appendix 1

NOTES

1.0 TECHNICAL DATA - GENERAL

1.1 Rated Load

The range of rated loads must be related to the available car areas and to EN 81-1 Tables 1.1, 1.2 and EN 81-2 Tables 1.1, 1.1A and 1.2.

Thus it is not anticipated that a model range be unrelated to the number of persons to be transported.

1.2 Suspended Load

This gives the information necessary for the interaction with the building requirements.

1.3 Rated Speed

To some extent this will be related to 1.6, it is not envisaged that there should be almost unlimited min/max figures. There are natural break limits imposed by EN 81. It is anticipated these will be reflected in this item.

1.4 Range of Travel

This is an important consideration for traction calculations in the case of EN 81-1 lifts and technical limitation of the ram for EN 81-2 lifts.

The minimum figures may not be significant.

1.5 Mass of Car

The figures quoted in the table should reflect the absolute minimum and maximum values for the overall range.

Within any particular rated load it could be that differing technical requirements will influence the overall mass of the car but without necessarily changing the range of the 'model'.

A different model would emerge should the range of mass for a particular rated load fall outside a reasonable tolerance. From a practical viewpoint 'reasonable' needs to reflect the fact that the mass is normally a calculation and not usually subject to weighing.

1.6 Drive System

This item should recognise the primary Drive System Type eg:-

Traction (all types)
Hydraulic (direct/indirect) including all types of pump
Rack and Pinion
Scissor
Guided Chain

Nevertheless within the category traction since fundamental safety components and other equipment changes occur by virtue of the EN 81 standards it is not envisaged that one model range covering all systems will be submitted for type-examination. Again the number of combinations for

one range should be such that no confusion can arise between the manufacturer and the notified body.

1.7 Location of Drive

This may be self evident, but it is anticipated that if the location of the drive brings about significant changes to the model different ranges are envisaged.

By way of example is the case of a traction lift, a machine room above is considered to be a different range to the machine room below.

In the case of a hydraulic lift this may not be significant unless the machine room is so remote that technical considerations are not compatible.

1.8 Entrance

It may be perfectly feasible to accommodate differing types of entrance in one model range ie single sliding doors and centre opening doors since the resultant masses may be within reasonable range. Likewise 800mm and 900mm entrances may also be acceptable.

However, one entrance configuration with an alternative two entrance style may vary the overall mass in the calculations such that it is not sensible for one model range to be produced, even ignoring layout details.

Differing types of motor control are seen to be allowable in any model range.

2.0 TECHNICAL DATA - SAFETY COMPONENTS

The fundamental consideration is that alternative sources for components including Safety Components must be allowable for any model. Nevertheless at the time of submission the alternatives must be provided so that the model can be truly assessed against the alternative sources.

In the case of safety components each will have been type-examined and therefore carry a CE mark. As a consequence direct comparisons of application can be made and satisfied.

By way of example lift companies do not manufacture polyurethane buffers ie energy accumulation types with non-linear characteristics, but obtain these from other sources. All of these will have been type-examined and CE marked yet will inevitably carry the original equipment manufacturers identification number. Each must be considered as equivalent and interchangeable within the concept of the model.

2.1 Locking Devices

Type 1 and 2 could equate to the variations demanded by the entrance configuration eg side opening/centre opening.

Each type would be submitted (with alternative supply sources) so that the notified body can decide what to examine.

2.2 Safety Gears

In this case it could be that in order to cover the whole rated load range two assemblies of safety gear are required. By way of example in order to cover total range of suspended loads from say minimum 1,500 kg to 3,000 kg maximum, safety gear type 1 whose range when type-examined is 1,000 - 2,200 kg and safety gear type 2 whose range when type-examined is 2,200 - 3,500 kg would be needed. The safety gears of course would be of identical type eg both progressive. When submitted for type-examination the application for approval would still be limited for the model to 1,500 - 3,000 kg. (Obviously these could still be applied over this total range in the non-model or alternative model concept).

It is not considered that instantaneous/progressive alternatives would be one model range unless it can be demonstrated that all other criteria are not affected.

2.3 Ascending Car Overspeed Protection

The application of such devices is not dissimilar in concept from a safety gear and therefore the same principles will apply.

2.4 Governor

It is felt that it may be necessary to have two types of governor for one model range. So again whilst the two types of governor will each have been type-examined for their application, and be CE marked, both types may be considered as part of one model lift range.

Whilst the safety gear which the governors operate may not change on account of speed where a model has a wide range of speeds a governor may not cover all applications.

2.5 Buffers

Not all types of buffer are safety components as defined in the Directive, energy accumulation types of simple design with a linear characteristic are excluded from type-examination.

Energy accumulation types with non-linear characteristics are comparable with those that have linear characteristics and either may fall within a model and the categories 1 and 2 in the table.

Where energy dissipation types are to be used these may cover a range of speeds and may also be types 1 and 2.

2.6 Hydraulic Valves

Differing types of rupture/one-way restrictor valves are used in hydraulic lifts, each will have been type-examined. They may be considered equivalent to each other in terms of overall model application.

2.7 Electronic Safety Devices

Since EN 81 allows these as an alternative to a Safety Contact it is seen that differing types may be applied within any one lift concept, type 1, 2, 3 and 4 is to recognise this fact. Each type will have been type-examined and therefore fit for its purpose.

3.0 TECHNICAL DATA - OTHER COMPONENTS

When submitting details for such components generally these will need to satisfy minimum requirements covering their performance. Thus the model will not be nullified should higher performance criteria be applied.

By way of example, if under 3.2 'Guiderails' the maximum span quoted is 2.2m then fixings at 1.8m are acceptable. Likewise if the guiderail type is T....., then it is acceptable to use type T..... where the profile is identical.

3.1 Suspension Ropes

Details to be given:-

(a) Number of ropes
(b) Breaking load
(c) Construction
(d) Certification

Appropriate calculations will be provided to ensure the selection gives satisfactory Safety Factors etc for the application.

This information should not preclude a manufacturer from fitting extra ropes, or those with a higher breaking load, if it so chooses to do so.

A manufacturer must have the freedom of choice of rope supplier.

3.2 Guiderails

Information to be provided will be:-

(a) Type (including surface finish)
(b) Maximum Span

This information will be supported by appropriate calculations so as to satisfy maximum deflection limits.

As indicated by the example in 3.0 a model should not be nullified if any quoted criteria is improved when using alternatives.

3.3 Compensation

Compensation is a means of providing adequate traction by the fitting of ropes, chains or other methods. Therefore, provided proper materials are used to achieve identical results a manufacturer should be allowed the choice of whichever method it considers best for a particular application. By way of example a chain could be substituted by a weighted belt to give comparable results.

3.4 Doors

Generally sliding doors, manual doors and power operated types would result in separate models. However, sliding shutter doors could be either manual or power operated and be taken as alternatives within the scope of a single model provided the intention is clear at the time of application. The same might apply to hinged landing doors.

3.5 Door Drive System

This has been mentioned under 1.8 where it is seen that door motor control using different techniques should not result in a separate model assessment which should be allowed as interchangeable equipment.

Obviously any type must satisfy the overall safety requirements required by the Directive.

3.6 Suspension Configuration

Provided safety components are not affected then there should be no restriction on types of suspension.

Whether a model uses 1:1 or 2:1 roping should not materially affect safety issues. Whereas in the case of a hydraulic lift direct/indirect types need differing safety components and as a consequence would result in separate models.

However, central/eccentric (cantilevered) suspension may be allowable if it does not impact on other components.

3.7 Car

Details should be provided to give an adequate description of the construction and dimensions of the car.

The car construction could be such that it is designed to incorporate add-on decor panels etc.

Provided information is given within the limits of the mass under 1.5 glass panels might be offered as an alternative (although generally the overall method of construction would be so different that two models would naturally result).

Some cars might be designed with an integral sling whilst others could have a separate sling. This does not impinge on safety and therefore is not a significant issue for defining the model.

3.8 Machine

Criteria for the machine need involve no more than that necessary to provide safe performance and should not preclude a manufacturer from applying a higher specification should he choose to do so.

	NB-L COORDINATION GROUP OF NOTIFIED BODIES FOR LIFTS 2014/33/EU	**NB-L/REC 2/008 Version: 05 Date: 13.09.2016**

RECOMMENDATION FOR USE

Keywords: **CAP, (Conformity assessment procedure), Certificate, Model lift, NB (notified body), Type examination, two landings**		**Proposed by NB-L on 18.11.2015 Approved by NB-L on 18.11.2015** **Endorsed by Lifts Working Group on 30.06.2016**
Related to Directive: 2014/33/EU **Annex/Clause: Article 16 (a), i - Annex IV, B**	**Related to other directives:** **Annex/Clause:**	**EN/prEN:** **Annex/Clause:**

Question:

Can an EU-type examination be carried out on a 2-level lift?

Answer:

Yes. Despite of Annex IV, B clause 2 d), it is possible to carry out an EU-type examination on a 2-level lift. In the type examination certificate this limitation has to be clearly indicated.

History:

Based on COFNA interpretation sheet 0.001, discussed at the 7th NB-L meeting, decided at the 8th NB-L meeting, endorsed by the StC.

Amended according to Directive 2014/33/EU at the 36th NB-L meeting, endorsed by the LWG on 30 June 2016.

According to the "Rules of Procedure", clause 2.7, it is expected that Notified Bodies take recommendations into consideration. Recommendations for Use, which have been endorsed by the Lifts Working Group become decisions according to 2014/33/EU, Article 24 (11).
It is in the responsibility of the user of this document, that its latest version is used.

NB-LIFT EUROPEAN CO-ORDINATION NOTIFIED BODIES	**NB-L** **CO-ORDINATION OF NOTIFIED BODIES** **LIFTS DIRECTIVE** **95/16/EC**	**NB-L/REC 2/010** **version: 04** **date: 07-05-03**

DRAFT

NB-L RECOMMENDATION FOR USE

Keywords: NB; CAP; Certificate; remark on Annex I, 2.2;	**Proposed by TS on 01-11-15,** **Decided by NB-L/HC on 06-11-22,** **Modified by NB-L/HC on**
	StC: to be approved **by WP X done on 07-04-23** **by OP done on**
related to Directive: 95/16/EC **Article: 8 (2) Annex: I, 2.2 Clause:**	**prEN/EN:** **Clause:**

Question:

There is no common practice in the Member States regarding the application of Annex I, 2.2 prior approval. How can the interested parties be made aware about the needs in the specific case of installation of a lift?

Answer:

NB certifying solutions of measures alternative to EN 81-1/2 to assure the refuge spaces above and underneath the car by the way of type examination or design examination shall add a notice to the relevant certificate using the wording:

"According to section 2.2 of Annex I to the Lifts Directive, the application of alternative measures to prevent the risk of crushing above and underneath the car is restricted to installations where the requirement for free space or refuges is impossible to fulfil and may be subject to prior approval by national authorities."

History: Conclusion in the 10th meeting of NB-L/HC; discussed at the NBL-17; modified according to decision made at the NBL-17 meeting; approved at NBL-18

According to the "Rules of Procedure", clause 2.7, it is expected that Notified Bodies take recommendations into consideration

NB-LIFT	**NB-L COORDINATION GROUP OF NOTIFIED BODIES FOR LIFTS 2014/33/EU**	**NB-L/REC 2/011 Version: 07 Date: 13.09.2016**

RECOMMENDATION FOR USE

Keywords: **Rescue operation**		**Proposed by NB-L on 18.11.2015** **Approved by NB-L on 18.11.2015** **Endorsed by Lifts Working Group on 30.06.2016**
Related to Directive: **2014/33/EU** **Annex/Clause:** **Annex I 4.4, 6.2; IVB, V, VIII, XI**	**Related to other directives:** **Annex/Clause:**	**EN/prEN:** **Annex/Clause:**

Question:

How can passengers be rescued after a blockage of a lift with the car in a position where the passengers cannot be rescued safely?
E.g. due to lack of machine-power or traction, after an electrical and/or a mechanical breakdown including a tripped safety gear.

Answer:

For lifts which remain blocked, means must be provided to bring the car safely to a landing to allow the opening of the car- and landing doors and release of the trapped passengers. The instruction manual shall de- scribe those means and specify any special tools and equipment to be used for such operations. Ideally these special tools and equipment shall be always part of the lift and available for each lift type one set only on site throughout its life-cycle. It should be possible for rescue operations to be carried out by one person, except in exceptional circumstances. When carrying out final inspection, unit verification or UE Type examination Notified Bodies must check if those emergency release measures have been designed and written in the owners instruction manual correctly. Notified Bodies must also carry out a functional check that the measures can be applied safely as written.

Exceptional circumstances are e.g. when the counterweight strikes the buffer, the car jumps and the safety-gear blocks the car at the very top of the well; in this rare case special equipment and more persons may be needed.

History:

Prepared by NB-L/AH -WG group on the basis of an order of the NB-L; considered at the 12th NB-L meeting; decided at the 13th NB-L/HC meeting, modified and then approved at 17th NB-L meeting, endorsed by the StC.

Amended according to Directive 2014/33/EU at the 36th NB-L meeting, endorsed by the LWG on 30 June 2016.

NB-LIFT	**NB-L COORDINATION GROUP OF NOTIFIED BODIES FOR LIFTS 2014/33/EU**	**NB-L/REC 2/012 Version: 11 Date: 13.09.2016**

RECOMMENDATION FOR USE

Keywords: **procedures and equipment for inspection, examination and testing**		**Proposed by NB-L on 18.11.2015 Approved by NB-L on 18.11.2015** **Endorsed by Lifts Working Group on 30.06.2016**
Related to Directive: 2014/33/EU **Annex/Clause: Annex I 1.1, 6.2, V, VIII, X, XI, XII**	**Related to other directives:** **Annex/Clause:**	**EN/prEN:** **Annex/Clause:**

Question:

How can routine inspection, examination, testing and rescue operations be safely executed at lifts where particular procedures, activities and/or special equipment are required? This question does not expect the answer to consider requirements for major repairs, refurbishment or abnormal parameter changes

Answer:

For lifts where inspection, examinations, testing and rescue operations require particular procedures, activities and/or special tools and equipment

- means must be provided for safe access to all inspection, testing, examination and rescue points,
- tools and equipment shall be always part of the lift, available for each lift type, one set only on site throughout its life-cycle[1)].

The necessary tools and equipment must be provided for safe and easy performance of inspection, examination, tests and rescue operations. The instruction manual must describe those means and how they are to be used safely. A functional check that the measures can be applied as safely as written shall be carried out during conformity assessment procedures.

Competent parties shall, by following the instructions provided by the OEM (Original Equipment Manufacturer), be able to use these instruments or equipment as part of safe maintenance, inspections and rescue operations. Instructions shall describe the use of such equipment.

1) Special equipment such as specific tools (not hoists or test weights) shall be available. (For example, tools for allowing movement of the lift car other than at normal duty.)

History: prepared by NB-L/AH-WG group based on an order of NB-L; considered at the 12th NB-L meeting; approved at the 13th NB-L meeting, discussed again, modified and approved at the 20th NB-L meeting; endorsed with reservation of deleting the following sentence “Inspection, examination, testing and rescue operations should, normally, need to be carried out by one person only” from the Answer on 28.04.2008. The deletion was approved at the 21st NB-L meeting, endorsed by the StC.

Amended according to Directive 2014/33/EU at the 36th NB-L meeting, endorsed by the LWG on 30 June 2016.

NB-LIFT	**NB-L COORDINATION GROUP OF NOTIFIED BODIES FOR LIFTS 2014/33/EU**	**NB-L/REC 2/013 Version: 07 Date: 13.09.2016**

RECOMMENDATION FOR USE

Keywords: **Driving unit in the well**		**Proposed by NB-L on 18.11.2015** **Approved by NB-L on 18.11.2015** **Endorsed by Lifts Working Group on 30.06.2016**
Related to Directive: **2014/33/EU** **Annex/Clause:** **Annex I 1.1, 6.2, IVB, V, VIII, XI,**	**Related to other directives:** **Annex/Clause:**	**EN/prEN:** **Annex/Clause:**

Question:

How can equipment in the well be reached for routine maintenance, adjustment and inspection in all circumstances?

Answer:

Lifts must be provided with means of safe access to all equipment in the well that may require intervention in all circumstances. All solutions must follow the ranking given in Directive 2006/42/EC, Annex I, 1.1.2, part b. The instruction manual must describe those practical means and how they are to be used safely. The means shall be part of the lift and always be available for each lift type one set only on site of the lift throughout its life-cycle. When carrying out final inspection, unit verification or EU-Type examination Notified Bodies must check if those measures have been designed and written in the owners instruction manual correctly. Notified Bodies must also carry out a functional check that the measures and equipment can be applied as safely as written.

This answer does not address particular requirements necessary for replacements or repair of components, which may require additional items to be brought to site.

History:

Prepared by the NB-L/AH-WG group on the basis of an order of NB-L; considered at the 12th NB-L meeting; decided at the 13th NB-L meeting, modified and then approved at the 17th NB-L meeting and endorsed by the StC.

Amended according to Directive 2014/33/EU at the 36th NB-L meeting, endorsed by the LWG on 30 June 2016.

According to the "Rules of Procedure", clause 2.7, it is expected that Notified Bodies take recommendations into consideration. Recommendations for Use, which have been endorsed by the Lifts Working Group become decisions according to 2014/33/EU, Article 24 (11).
It is in the responsibility of the user of this document, that its latest version is used.

NB-LIFT	**NB-L COORDINATION GROUP OF NOTIFIED BODIES FOR LIFTS 2014/33/EU**	**NB-L/REC 2/014 Version: 06 Date: 13.09.2016**

RECOMMENDATION FOR USE

Keywords: **Activities by one person only**		**Proposed by NB-L on 18.11.2015** **Approved by NB-L on 18.11.2015** **Endorsed by Lifts Working Group on 30.06.2016**
Related to Directive: **2014/33/EU** **Annex/Clause:** **Annex I 1.1, 6.2, IVB, V, VIII, XI**	**Related to other directives:** **Annex/Clause:**	**EN/prEN:** **Annex/Clause:**

Question:

How can maintenance, adjustment, inspection, and repair on a lift safely be carried out by one person?

Answer:

Lifts must be designed on the assumption that normal maintenance, adjustment, inspection and repair will be done by one person under safe access and working conditions. These conditions have to be described in the instruction manual. When situations require more than one person, the instruction manual has also to indicate this and has to describe the additional measures and procedures. When carrying out final inspection, unit verification or EU-Type examination Notified Bodies must check if those measures have been designed and written in the owners instruction manual correctly. Notified Bodies must also carry out a functional check to ensure that the measures can be applied safely as written.

History:

Prepared by the NB-L/AH-WG group on the basis of an order of NB-L; considered at the 12th NB-L meeting; decided at the 13th NB-L meeting, modified and then approved at the 17th NB-L meeting, endorsed by the StC.

Amended according to Directive 2014/33/EU at the 36th NB-L meeting, endorsed by the LWG on 30 June 2016.

According to the "Rules of Procedure", clause 2.7, it is expected that Notified Bodies take recommendations into consideration. Recommendations for Use, which have been endorsed by the Lifts Working Group become decisions according to 2014/33/EU, Article 24 (11).
It is in the responsibility of the user of this document, that its latest version is used.

NB-LIFT	**NB-L CO-ORDINATION OF NOTIFIED BODIES LIFTS DIRECTIVE 95/16/EC**	**NB-L/REC 2/017 version: 07 date: 17-09-2007**

NB-L RECOMMENDATION FOR USE

Keywords: Leaving the pit		**Proposed by NB-L on 02-11-20, Decided by NB-L/HC on 03-11-13, Modified by NB-L/HC on 23-05-2007**
		StC: to be approved by WP X done on 07.09.13 by OP ☐ done on
Related to Directive: 95/16/EC Annex: I, Clause: 1.1 Annex: V; VI; X; XIII	**Related to Directive 98/37/EC Annex I, Clause: 1.1.2; 1.5.14; 1.6.2**	**prEN/EN: - Clause: -**

Question:

How can the working area in the pit be left safely (EN 81-1/2:1998/A2:2004, clause 6.4.4.2) under the condition that the car is blocked by the devices required in EN 81-1/2:1998/A2:2004, clause 6.4.4.1 b.

Answer:

When the car is blocked as stated in the question there is an emergency situation. In order to make it possible for the maintenance engineer to leave the pit safely the minimum distance between the sill of the landing door and the bottom line of the apron to allow the working area in the pit to be left safely (EN 81-1/2:1998/A2:2004, clause 6.4.4.2) has to be at least 0.50 m (a value taken from EN 81-1/2:1998, clause 8.12.2, car trap-doors, the large side of the car trap-door) when the car is blocked by the devices required in EN 81-1/2:1998/A2:2004, clause 6.4.4.1 b.

History: Prepared by NB-L/AH -WG – WC on base of an order of NB-L/HC; consideration in 12th NB-L/HC meeting; decided on 03-11-13 by 13th NB-L/HC, discussed and approved at the 19th NB-L/HC meeting

According to the "Rules of Procedure", clause 2.7, it is expected that Notified Bodies take recommendations into consideration

NB-L CO-ORDINATION OF NOTIFIED BODIES LIFTS DIRECTIVE 95/16/EC	NB-L/REC 2/018 version: 04 date: 07-05-03

NB-L RECOMMENDATION FOR USE

Keywords: **CAP, Landing doors, fire resistance, Certificates**	**Proposed by NB-L on, 03-11-13** **Decided by NB-L/HC on, 03-11-13** **Modified by NB-L/HC on 06-11-21**
	StC: to be approved **by WP X done on 07-04-23** **by OP done on**
Related to Directive: 95/16/EC **Article: Annex: I Clause: 4.2**	**EN: 81-58** **Clause:**

Question:

What shall be considered in the conformity assessment procedures concerning Annex I, clause 4.2 on the fire resistance of lift landing doors?

Answer:

EHSR 4.2. of Annex I of Directive 95/16/EC expresses the requirement that lift landing doors that have to contribute to the protection of the building against fire must be suitably resistant to fire.

The fire resistance of lift landing doors is thus a requirement of the Lifts Directive 95/16/EC which covers the corresponding requirement of the Construction Products Directive 89/106/EEC (see 95/16/EC Committee – Working Group on Lifts - Doc. 2002.06 and Doc. 2006.01).

The conformity assessment procedures to be applied to this aspect of lift safety are determined by the Lifts Directive 95/16/EC. Lifts certified as in conformity to EHSR 4.2. of the Directive 95/16/EC according to one of the conformity assessment procedures laid down in this Directive can be placed on the market and put in service freely in the EEA without the need for further national testing or approval procedures.

The harmonized standard EN 81-58: 2003 in support of the Lifts Directive, specifies a test method for determining the fire resistance of lift landing doors. It follows the general principles described in standards developed by CEN/TC 127. Additionally, it specifies a method for testing the integrity of lift landing doors intended to provide a fire barrier to the spread of a fire from the landing to the floors above through the lift shaft and includes a classification for lift landing doors that is identical to the classification specified in standard EN 13501-2.

For the conformity assessment procedures the following shall be considered:

<u>General</u>

Application of standards, including the EN 81-58, is voluntary. However, since the reference of EN 81-58 has been published in the OJEU (OJ C 36, 10.2.2004) as harmonized standard in relation with the lift Directive 95/16/EC, application of that standard confers a presumption of conformity with the essential requirement 4.2 of the Lifts Directive.

<u>Organisation to carry out the fire resistance test</u>

The test method described in EN 81-58 requires sophisticated test equipment and expertise, which, today, is only available in very few test laboratories. All of these test laboratories are approved bodies under the Construction Products Directive 89/106/EEC.

A manufacturer which is certified under annex IX or XIII of the Lifts Directive and which is providing the same equipment and expertise can also carry out these tests. In this case the notified body auditing the annex IX or XIII system has to check the testing equipment and the capability of the manufacturer.

NB-L CO-ORDINATION OF NOTIFIED BODIES LIFTS DIRECTIVE 95/16/EC	NB-L/REC 2/018 version: 04 date: 07-05-03

Certification

According to EN 81-58 the specification of the door, the evaluation and the results of the test, etc. are described in details in a test report. As a summary a type examination certificate similar to that in EN 81-1/2 annex F.0.2 can be issued by the test laboratory or manufacturer which includes the name of the test laboratory, the type(s) of door(s), the certification number, the name and address of the manufacturer, the references of the test method standard, the class of the door, the field of application, etc. This certificate is clearly not an EC type examination certificate.

It is of normal practice, to avoid endless series of tests, that not every variation within a door family is submitted to a specific test, where experience can confirm that no significant negative influence for the fire resistance has to be expected.
In this case, the certificate will be an overall certificate for a door family including all above mentioned information.

Marking of the door

The door shall be fitted with a data plate with information about the manufacturer, the type of door, the certification number, the references of the test method standard, the class of the door and other relevant information. Since lift landing doors including their fire resistance are not mentioned in the list of safety components in Annex IV of the Lifts Directive they cannot be CE marked under the Lifts Directive.

Production control

A production control for fire-rated lift landing doors is not required under the Lifts Directive. Due to the fact that it is quite impossible to check the compliance of an installed door with the type approved sample during a final inspection of a lift a production control should be established similar to the procedures given in Annex VIII, IX or XI. .

Classification

EN 81-58 contains a classification system identical to the classification system for other construction products (according to EN 13501-2). The classification system covers the test criteria (integrity E, insulation I, radiation W) and the duration of the test. Each member state has to select and determine a class of door, which suits to their national fire protection concepts in buildings. During the conformity assessment procedures it has to be checked that the lift landing doors comply with the required door class of the member state and for the building in which they are installed.

Use of existing certificates according to national regulations

Up to now lift landing doors have been tested and certified according to existing national regulations. Most member states will select a door class according to EN 81-58 which ensures a comparable safety level as their existing national regulations. In these cases the Member State considers that lift landing doors are certified according to the former national regulations satisfy EHSR 4.2 of the Lifts Directive and therefore do not necessarily need retesting to EN 81-58 for the time being. In these cases the National Standard shall not be used as a substitute to EN 81-58 when exporting doors to other Member States.

History: Prepared by NB-L/AH -WG – CW on base of an order of NB-L/HC; consideration in 12th NB-L/HC meeting; decided on 03-11-13 by 13th NB-L/HC; adopted by Stg LC on 04-09-08, modified on 04-11-17 by 15th NB-L/HC; proposed amendment 2 at the 18th NB-L/HC and accepted after some amendments at the 18th NB-L/HC

NB-LIFT	**NB-L CO-ORDINATION OF NOTIFIED BODIES LIFTS DIRECTIVE 95/16/EC**	**NB-L/REC 2/019 version: 02 date: 07-05-03**

NB-L RECOMMENDATION FOR USE

Keywords:? Emergency operation; Manual / Electrical / 400N		**Proposed by NB-L on 22-11-2005, Decided by NB-L/HC on 23-05-2006, Modified by NB-L/HC on XX-XX-XX** **StC: to be approved by WP X done on 07-04-23 by OP done on**
Related to Directive: 95/16/EC Annex: I, Clause: 1.1; 4.4; 6.2 Annex: V; X; XIII	**Related to Directive 98/37/EC Annex I, Clause: 1.1.2; 1.5.4; 1.7.4**	**prEN/EN: 81-1 :1998/A2 :2004 Clause: 12.5.1**

Question:

Is it correct that, although the effort required to move the car in the upward direction with its rated load does not exceed 400N, the machine is NOT provided with a manual means of emergency operation.
To be able to perform emergency operation an electrical means is fitted allowing the car to be moved to a landing.

Answer:

No, if the effort to move the car does not exceed 400N a manual means of emergency operation shall be provided.

If manual means aren't applied it is regarded as deviation to harmonized standard and shall be subject of design approval according the relevant Annex (V, X or XIII).

If the machine is not accessible the emergency rescue operation described in clause 14.2.1.4 of EN 81-1 may not be sufficient to guarantee a safe rescue operation in all circumstances: in those cases additional means shall be used and evaluated by a proper risk assessment.

History:
Prepared by NB-L/AH -FI; consideration in 16th NB-L/HC meeting; decided on 23-05-2006 by 17th NB-L/HC

According to the "Rules of Procedure", clause 2.7, it is expected that Notified Bodies take recommendations into consideration

NB-LIFT	**NB-L CO-ORDINATION OF NOTIFIED BODIES LIFTS DIRECTIVE 95/16/EC**	**NB-L/REC 2/020 version: 02 date: 07-05-03**

NB-L RECOMMENDATION FOR USE

Keywords: Impact risks		**Proposed by NB-L on 23-05-2006, Decided by NB-L/HC on 23-05-2006 Modified by NB-L/HC on XX-XX-XX** **StC: to be approved by WP X done on 07-04-23 by OP done on**
Related to Directive: 95/16/EC No reference	**Related to Directive 98/37/EC Annex I, Clause: 1.1.2; 1.6.2; 1.6.4**	**EN: 81 : Part 1 Clause: 5.7.1.1**

Pre-amble: Some designs of electric traction machine roomless lifts place the winding unit and/or its supporting cradle above the travelling area of the lift car or its sling assembly. When the lift car is at its extreme of travel as described within clause 5.7.1.1 of EN81: Part 1 there may be a risk of the car or sling striking the winding unit or its support. EN81:Part 1 does not specifically address the risk of impact between the lift car and a fixed object in the lift well. However clause 0.1.2.1 (d) recognises risks due to impact and 0.1.2.3 (d) requires components of the lift to be safeguarded. Also impact may create a risk to users of the lift.

Question:

In the absence of any other guidance shall we assume that the requirements of clause 5.7.1.1 (c) (2) apply as a minimum requirement? This measurement to remain even if the crushing and shearing risk to persons on car roof is prevented by guarding fitted to the lift car top?

Answer:

Yes, the minimum distance of $0.1 + 0.035v^2$ shall apply between the lift car and/or sling and any fixed object in the lift well when the lift is at the extreme of its travel.

All other areas on the lift car roof where an engineer may stand shall remain subject to the requirements of EN81: Part 1: Clause 5.7.1.1

History: Prepared by NB-L/AH -WG – WC on base of an order of NB-L/HC; consideration in 17th NB-L/HC meeting; decided on 23/05/2006 by 17th NB-L/HC

According to the "Rules of Procedure", clause 2.7, it is expected that Notified Bodies take recommendations into consideration

NB-LIFT	**NB-L CO-ORDINATION OF NOTIFIED BODIES LIFTS DIRECTIVE 95/16/EC**	**NB-L/REC 2/021 version: 02 date: 07-05-03**

NB-L RECOMMENDATION FOR USE

Keywords: Alarm device – two way communication system	**Proposed by NB-L on 06,11,21, Decided by NB-L/HC on 06,11,21 Modified by NB-L/HC on XX-XX-XX**
	StC: to be approved by WP X done on 07-04-23 by OP done on
Related to Directive: 95/16/EC **Article: Annex I Clause 4.5**	**EN: 81-28** **Clause: ====**

Question:

According to the Essential Requirements of the Lift Directive, lifts shall be connected to a rescue service by a two way communication system. In some cases several lifts are installed inside the same building. Is it possible to connect several lifts to a rescue service by only one telephone line ?

Answer:

The connection between the lift and the rescue service is covered by requirements listed in the Lift Directive and in the Standard EN81-28 as follows:

- Lift Directive 95/16/CE – E.S.R. 4.5: Cars must be fitted with two-way means of communication allowing permanent contact with a rescue service.

- Standard EN 81-28: many clauses refer to this aspect (e.g. 4.1.6; B2; necessity for the rescue service to understand the number of the lift from which the alarm is coming).

In conclusion, where multiple lifts are connected to one transmitter, the alarm shall be able to operate from each lift, the communication between the rescue service and the car shall be able to operate on each lift and the alarm system from one lift shall not prevent the alarm system from the other lifts to operate at the same time.
Vocal communication between the rescue service and the lift might not take place simultaneously.

Where several lifts are connected to a single telephone line a risk assessment may be necessary to verify the effectiveness of the measures adopted.

History: Prepared by NB-L/AH WG – CW on base of an order of NB-L/HC; modified and adopted in 18th NB L/HC meeting

According to the "Rules of Procedure", clause 2.7, it is expected that Notified Bodies take recommendations into consideration

★ NB-LIFT ★	**NB-L CO-ORDINATION OF NOTIFIED BODIES LIFTS DIRECTIVE 95/16/EC**	**NB-L/REC 02/024 version: 09 date: 15.01.2015**

NB-L RECOMMENDATION FOR USE

Keywords: MRL Penthouse version, criteria		**Proposed by NB-L on 15.11.2011, Decided by NB-L/HC on 20.05.2014 Modified by NB-L/HC on -** **StC: to be approved by WP X done on 03.11.2014 by OP done on**
Related to Directive: 95/16/EC Annex I, Clause: 1.5.2, 2.1, 4.4	**Related to Directive 2006/42/EC 1.1.2a, 1.5.14, 1.6.2**	**EN 81-1/2:A3 clause 6.2.1.b EN 81-1/2:A3 clause 6.6 EN 13015 clause 4.3.2.14 and -.15**

Pre-amble:
In the NB-L meeting the question was raised if there was any interest in a Recommendation for Use for MRL in a Penthouse situation. It became clear that in different Member States this situation is already the case and a global approach is appreciated.
This recommendation for use is meant to give a general solution for this situation.

Question:
Which criteria can be used to accept a Penthouse situation for Machineroomless ("MRL") lifts.

Answer:

In such a penthouse situation it is important, before the commencement of the lift installation, that "the person responsible for work on the building (new or existing) or construction and the installer of the lift on the one hand, should keep each other informed of the facts necessary for and on the other hand, take the appropriate steps to ensure the proper and safe use of the lift".

When the penthouse-situation leads to a deviation from the harmonised standard(s) it is necessary that a Notified Body is involved in the appropriate conformity assessment procedure according to the Lift directive 95/16/EC.

A "penthouse-situation" may be acceptable under the circumstances that emergency operation, including evacuation and free from entrapment, maintenance and inspection are possible by measures taken to create free access and egress to the lift, even in case of parts of the lift, which are situated in private premises.
The following technical measures should be considered first:

Technical Measures (which could be one or a combination of the following)

- Providing accessibility of the operation panel, e.g. by moving it to a public floor;
- Extend the 2-way communication from the lift also to the landings, which are located in the private premises;
- Other technical measures on a case by case basis.

NOTE: residual risks may still require additional organisational measures as detailed below.

Organisational Measures:

- There is a legally based document confirmed by all stakeholders concerned (e.g owner(s) of the penthouse, lift company, notified body, inspection body) including a clear process to guarantee continuity of this document over time;
- The presence and the content of this document shall be confirmed by all stakeholders;
- It shall be clearly stated in the document that access to the lift is guaranteed at all times;
- A copy of the document shall be kept with the lift for its lifetime.

NOTE: organizational measures should include automatically addressing liability issues.

Access via private premises maybe subject to national regulation.

History: Prepared by NB-L/AH-CW group and approved at the 32nd NB-L meeting in November 2013, received comments during the endorsement procedure, approved at the 33rd NB-L meeting in May 2014

According to the "Rules of Procedure", clause 2.7, it is expected that Notified Bodies take recommendations into consideration

	NB-L **CO-ORDINATION OF NOTIFIED BODIES** **LIFTS DIRECTIVE** **95/16/EC**	**NB-L/REC 02/025** **version: 04** **date: 15.02.2010**

NB-L RECOMMENDATION FOR USE

Keywords: Electric appliance, machine-room, temperature limit-exceeding		**Proposed by NB-L on 08-05-20,** **Decided by NB-L/HC on 09-05-20,** **Modified by NB-L/HC on 09-11-03** **StC: to be approved** **by WP ☒ done on 2010-02-10** **by OP ☐ done on**
Related to Directive: 95/16/EC **Annex: , Clause:**	**Related to Directive 98/37/EC** **Annex , Clause:**	**prEN/EN: EN 81-1/2:1998** **Clause: 13.3.6 of EN 81-1,** **13.3.5 of EN 81-2**

Question:

EN 81-1:1998, clause 13.3.6 and EN 81-2:1998, clause 13.3.5 states that~~,~~ when the temperature of an electric appliance with temperature monitoring exceeds the set limit, the car shall stop at a floor and shall not execute any new car command or outside call.

What conditions shall be fulfilled in order to prevent the users from being trapped if a sprinkler has been fit in the machine-room

Answer:

If a sprinkler has been fit in the machine-room, the following considerations shall be made in order to fulfil EN 81-1:1998, clause 13.3.6 and EN 81-2:1998, clause 13.3.5,

- EN 81-1:1998, clause 13.3.6 and EN 81-2:1998, clause 13.3.5 states that, when the temperature of an electric appliance with temperature monitoring exceeds the set limit, the car shall stop at a floor and shall not execute any new car command or outside call. This clause does not state at which floor the car should stop. In practice it will be the nearest floor.
- When the sprinkler is activated the installation shall automatically be cut off from the electric power by the main switch after the car has stopped at a floor with open doors.(Lift shall be cut from electric power before sprinkle is activated)
- As the fire department and insurance company may request a sprinkler in the machine room, damage caused by water is considered to be an insurance liability.
- The existence of a sprinkler installation causes an increased possibility of a car stopping with open doors and being shut off. This causes an increased possibility of fire transfer. This situation is unacceptable when the shaft doors are supposed to contribute to the fire-resistance of the building.
- EN81-73:2004, clause 5.3 states that the car – after receiving an alarm signal – should be sent to a preordained floor or to one of the preordained floors. EN81-73:2004, clause 5.4.2 provides for the possibility of more than one preordained floor in specific complicated situations. If a lift installation meets the requirements of EN81-73 it may be assumed that passengers will not be sent to a floor on fire and that there will be no fire transfer caused by open car doors. (some countries have requirements in national building regulations providing for closing the lift landing door (before the lift is switched off)

Finding:

The lift installation is to be designed and built as follows:

1. The sprinkler head
   a. is to be fitted to an end piece of the water pipe, while the water pipe in the machine room shall not have any taps to any other room.
   b. will not be fitted above any electrical device.
2. The sprinkler head shall be properly protected against any accidental bumping by means of a protective mesh**.**

NB-LIFT	**NB-L CO-ORDINATION OF NOTIFIED BODIES LIFTS DIRECTIVE 95/16/EC**	**NB-L/REC 2/026 version 05 date 2010-04-19**

NB-L RECOMMENDATION FOR USE

related to Directive 95/16/EC, EN 81-1/2:1998, 9.1, 9.2, 9.3 **Article Annex I Clause**	**Clause**

Keywords

The procedure of the examination of suspension media which are not according EN 81-1/2:1998.

Question

What criteria and characteristics should be considered for suspension media that is not in accordance with EN 81-1/2:1998?

Answers

Suspension arrangements which are not according EN 81-1/2:1998 need to be evaluated by a notified body.

The target is to achieve an equivalent level of safety to EN 81-1/2:1998

Key considerations include

- life expectancy and roping configuration
- suspension methods and ability to inspect
- traction and environment
- reaction in case of fire
- terminations

Life expectancy and roping configuration

If suspension arrangements deviate from the requirements of the EN 81-1/2:1998 (for example if the nominal diameter of the rope is smaller than 8 mm) bending endurance testing shall be conducted

- for a worst case roping configuration (D/d, safety factor, groove parameters, most stressed bending zone)
- for a specific range of groove parameters with fixed D/d and most stressed bending zone.

Proof of equivalence based only on calculations without former bending endurance tests is not acceptable.

The results of the bending endurance tests shall be the basis of the life expectancy calculation. Any deviations of the bending endurance tests have to be considered by own statistical experience of the manufacturer or by the state of the art.

Suspension methods and ability to inspect

- steel wire ropes d < 8 mm or nominal strength R > 1770 N

  Conventional discard criteria should apply, like diameter loss (for example 6% according to ISO 4344 ed2004) or wire breaks (for example according to DIN 15020) etc. whichever occurs first.

  If this is not possible, the installer shall define a safe and suitable discard criterion (in coordination with the suspension media manufacturer and notified body)

- coated (belts etc.) and alternative suspension media

  The installer shall define a safe and suitable discard criterion (in coordination with the suspension media manufacturer and notified body)

Traction and Environment

For coated (belts etc.) and alternative suspension media the friction values have to be determined, validated and documented.

For conventional suspension media (steel wire ropes) the rules and conventions remain valid.

Environmental conditions such as UV radiation, humidity, chemical and biological influence and dust and dirt shall not adversely affect the traction and friction values.

Reaction in case of fire

In the case of fire (in front of the landing doors) the integrity of the suspension media and the terminations shall be maintained.

Terminations

The ends of the ropes shall be fixed to the car, counterweight or balancing weight, or suspension points of the dead parts of reeved ropes by means of metal or resin filled sockets, self tightening wedge type sockets, heart shaped thimbles with at least three suitable rope grips, hand spliced eyes, ferrule secured eyes, or any other system with equivalent level of safety.

The fixing of the ropes on the drums shall be carried out using a system of blocking with wedges, or using at least two clamps or any other system with equivalent level of safety.

History: RfU drawn up by NB-L AH SC; approved at the 24th NB-L/HC meeting and endorsed on 13.04.2010.

3. The sprinkler shall operate at a high operating temperature (minimal 93^{O}C) and be operationally reliable for a long time.
4. A temperature switch shall be placed immediately next to the sprinkler contact, disconnecting the lift installation in a way as described in EN81-73, clauses 5.3.1 through 5.3.5 and 5.4, with the car being sent to a preordained floor or one of the preordained floors. This shall be done at a temperature which is at least 20 degrees below the operating temperature of the sprinkler.
5. The temperature switch mentioned above shall be sealed to prevent any changes to its tuning.
6. The main switch of the lift installation shall be executed as an automatic switch as pursuant to EN 81-1/2:1998 clause 13.4.2.
7. The main switch shall be disconnected automatically by a sprinkler contact (or any other signal from the sprinkler installation) after the car has stopped at a floor with open doors. To guarantee this a 'door-open'-contact shall be integrated in the electrical circuit.
8. In accordance with EN81-72 (fire lifts) clause 5.3.1 and 5.11.2 all components of the electrical installation shall be protected against dripping and splashing water or be provided with a casing classified as IPX3 in accordance with EN60529:1991.
9. The user manual shall stipulate that inspection activities of the sprinkler installation shall only be executed in the presence of a lift expert, e.g. a maintenance engineer employed by the organisation which is contracted to maintain the lift installation.
   The user manual shall indicate the following risks:
   a. trapping
   b. creeping of the lift car
   c. moving components
   d. electrocution
   e. slipping
   f. overflowing of the oil reservoir
10. A warning shall be affixed to the door of the machine room, indicating that inspection activities of the sprinkler installation shall only be executed in the presence of a lift expert, e.g. a maintenance engineer employed by the organisation which is contracted to maintain the lift installation. This warning shall also mention that maintenance activities can be hazardous to both maintenance personnel and lift passengers.
11. To prevent the danger of electrocution a warning shall be affixed to the control cabinet indicating that the main switch shall be first disconnected if there is a possible presence of any moisture.

History: Prepared by Mr. Tegel (NB 0400) on base of an order of NB-L/HC received at the 20th NB-L/HC meeting held on 20-21 November 2007, discussed and approved at the 23rd NB-L/HC meeting; discussed again and approved at the 24th NB-L/HC meeting

According to the "Rules of Procedure", clause 2.7, it is expected that Notified Bodies take recommendations into consideration

	NB-L **CO-ORDINATION OF NOTIFIED BODIES** **LIFTS DIRECTIVE** **95/16/EC**	**NB-L/REC 02/027** **version: 04** **date: 15.01.2015**

NB-L RECOMMENDATION FOR USE

Keywords: Climate control, well, ventilation systems		**Proposed by NB-L on 12.11.2013,** **Decided by NB-L/HC on 20.05.2014** **Modified by NB-L/HC on -**
		StC: to be approved **by WP X done on 03.11.2014** **by OP ☐ done on**
Related to Directive: 95/16/EC	**Related to Directive 2006/42/EC** **-**	**EN 81-1/2:A3 clause 5.8, 5.2.3** **EN 13015 clause 4.3, 5.2, 7**

Pre-amble:
In the NB-L meeting the question was raised if there was any interest in a Recommendation for Use for climate control systems, e.g. ventilators, shutters, air-conditioners etc. in the well. It became clear that in different Member States these systems are applied under different conditions and a uniform approach is appreciated. Furthermore in some Member States any climate control systems, such as ventilators, shutters etc. are seen as equipment not intended for the operation or for the safety of the lift, and therefore would be in conflict with par. 5.8 of EN 81-1. This recommendation for use is meant to give general uniform conditions for application.

Question:
Under which conditions climate control systems, e.g. ventilators, shutters, air-conditioners etc. can be accepted in the lift well?

Answer:
Climate control systems in the well, such as ventilators, shutters, air-conditioners etc. – further: climate control systems- are seen as building equipment with a specific function for the lift, provided the system has the function of ventilation, controlling air flow, heating or cooling, air drying or humidification of the well. When work has to be carried out in the well, specific requirements on lift safety have to be respected. As there is a functional relation with the lift, climate control systems are not conflicting with the exclusive use of the well as per paragraph 5.8 of the EN 81-1/-2 or the Lifts Directive art. 2.3. These systems are not covered by the EHSR's of the Lifts Directive. They are part of the complete building climate design, where the lift well is just one of the specific building spaces.
Climate control systems could therefore be allowed in the lift well under the following conditions:

Conditions:

- The climate control system may not in any way restrict free access to all lift components
- The climate control system may not in any way affect the safety and safe operations (including inspection, maintenance and rescue operation) of the lift
- The free spaces in the well shall remain in compliance with the harmonised standard or the EC type-certified dimensions
- (Main) switch(-es) shall be available in the machine room or in the vicinity of the system to switch off the power and control circuit of the climate control system (To be defined by the person responsible for the design of the Lift, as well as for the power supply of the system)
- If access to the well or machine room is necessary for adjustment and/or maintenance of the climate control system this shall only be allowed for or under the supervision of authorised personnel. Related instruction shall be clearly documented in the instruction manual at the lift
- The system may not in any way be used for the climate control of spaces other than the lift well
- The lift installer shall inform the building designer with specific operation limits such as temperature, humidity etc. for the lift components and data, determinative for the climate in the installation such as, heat production of the lift, glass area in the walls of the well exposed to sunlight, outdoor well area, number of persons in the car etc.

In any case, the technical documentation and the instruction manual (as defined in paragraph 6.2 of annex I and paragraphs 4a and 5 of annex VI of the LD 95/16/CE) provided by the person responsible for the design of the lift (as defined in the last sentence of article 8 §2 of the LD 95/16/EC) must include the description of the climate control system used, its interfaces with the lift and its maintenance instructions.

Conformity assessment procedures Lifts directive

As there is no EHSR of the Lifts directive 95/16/EC covering these climate control systems, there is no specific need to include the assessment of these systems during one of the conformity assessment procedures of art. 8 of the Lift directive in the design and production stage of the lift or the system. After installation, the final inspection should include an assessment on the conditions described in this RfU.

National building requirements
As climate control systems in the well are part of the building design, the installer shall in addition to this RfU always respect national building codes.

History: Prepared by NB-L/AH-CW group and approved at the 33rd NB-L meeting on 20 May 2014

According to the "Rules of Procedure", clause 2.7, it is expected that Notified Bodies take recommendations into consideration

	NB-L **CO-ORDINATION OF NOTIFIED BODIES** **LIFTS DIRECTIVE** **95/16/EC**	**NB-L/REC 3/001** **version: 05** **date: 01-07-04**

NB-L RECOMMENDATION FOR USE

Keywords: **CAP, NB, Lift, Annex XIII, Assessment**	**Proposed by NB-L on 98-11-12,** **Decided by NB-L/HC on 00-05-09,** **Modified by NB-L/HC on**
	StC: to be approved **by WP X done on 00.-12-31** **by OP ☐ done on**
related to Directive: 95/16/EC **Article: Annex: XIII Clause:**	**prEN/EN:** **Clause:**

Question:

What are the basic considerations a NB has to observe, when assessing an Annex XIII system for lifts?

Answer:

Annex XIII, 2 states that the system shall contain the following activities: Design, manufacture, assembly, installation and final inspection of a lift. The applicant has to demonstrate that he has the competence to fulfil these activities. Competence means the capability of specifying and verifying the activities in detail, but not necessarily actually performing them always. In any case he remains fully responsible.

In detail that is:

Design means, that the applicant is able to

- perform a risk analysis
- define at least the configuration of (a) lift(s) to be installed,
- check whether these specifications are met or not and
- detect deviations from requirements of harmonised standards.

Note:

- ability of risk analysis is essential (see LD, Annex I 3rd preliminary note).
  An applicant not having this ability is regarded as not being capable to design a lift in conformity with the LD.
- the ability to specify the lift design does not exclude the possibility to purchase components.
  A machine can be bought. One must be able to select the right type, fit for the purpose. This means for instance that knowledge about the applicability must as well be present, as knowledge about traction, possible combinations of ropes and sheaves, wrap angle, undercut, etc.
- design is defined as
  a) set of instructions (specifications, drawings, schedules, etc.) necessary to construct an artefact or service
  b) artefact or service itself.

continued on page 2

History: prepared by NB-L/AH-QM on base of an order of NB-L/HC; approved by NB-L/HC on 00-05-09, adopted by StC, editorially amended to new format of REC

According to the "Rules of Procedure", clause 2.7, it is expected that Notified Bodies take recommendations into consideration

Production includes manufacture and assembly.

In case of internal production clear specifications are needed on production procedures inclusive the controls during and after the production.

In case of external production clear specifications are needed about the subcontractors control.

Installation requires, that the applicant is able to

- specify the installation activities,
- install and
- check, whether the installation activities are performed correctly.

In case of outsourced installation clear specifications are needed about the subcontractors control.

The necessary means to carry out installation safely as well as working conditions during installation activities have to be taken into consideration.

Final Inspection means, that the applicant has the ability to

- specify the inspection activities,
- perform the inspection with competent persons
- document the final inspection and
- assess the results of the final inspection.

The final inspection shall be carried out by (a) person(s), where the conflict of interests between design, manufacturing, assembling, installation and final inspection cannot occur.

Design inspection needs to be addressed regarding the handling in case of deviation(s) from harmonised standard(s) taking into account the two possibilities

- general deviation (intended to be realised on more than one installation) and
- specific deviation (necessary on a single lift due to situation on site)

The application has to be made to the NB having approved the Annex XIII system.

The system requires procedures allowing the supervision of the system from design to final inspection.

NB-LIFT	**NB-L CO-ORDINATION OF NOTIFIED BODIES LIFTS DIRECTIVE 95/16/EC**	**NB-L/REC 3/002 version: 05 date: 01-07-04**

NB-L RECOMMENDATION FOR USE

Keywords: **CAP, NB, Safety component, Annex IX, Assessment**	**Proposed by NB-L on 98-11-12, Decided by NB-L/HC on 00-05-09, Modified by NB-L/HC on**
	StC: to be approved by WP X done on 00-12-31 by OP ☐ done on
related to Directive: 95/16/EC **Article: Annex: IX Clause:**	**prEN/EN:** **Clause:**

Question:

What are the basic considerations a NB has to observe, when assessing an Annex IX system for safety components?

Answer:

Annex IX, 2 states that the system shall contain the following activities: Design, manufacture, and final inspection of a safety component. The applicant has to demonstrate that he has the competence to fulfil these activities. Competence means the capability of specifying and verifying the activities in detail, but not necessarily actually performing them always. In any case he remains fully responsible.

In detail that is:

Design means, that the applicant is able to

- perform a risk analysis
- specify the design of a safety component,
- test whether these specifications are met or not

Note:

- ability of risk analysis is essential (see LD, Annex I 3rd preliminary note).
  An applicant not having this ability is regarded as not being capable to design a safety component in conformity with the LD.
- the ability to specify the design of a safety component does not exclude the possibility to purchase parts of the component.
- design is defined as
  a) Set of instructions (specifications, drawings, schedules, etc.) necessary to construct an artefact or service.
  b) Artefact or service itself.
- test includes to
  a) define the test methods
  b) define the necessary test equipment
  c) assess the results of the tests.

continued on page 2

History: prepared by NB-L/AH-QM on base of an order of NB-L/HC; approved by NB-L/HC on 00-05-09, adopted by StC, editorially amended to new format of REC

According to the "Rules of Procedure", clause 2.7, it is expected that Notified Bodies take recommendations into consideration

Manufacture incorporates the specification of

- production procedures, including subcontractors control,
- production control, including the frequency of checks,
- assessment of the results of production control,

Final inspection of safety component is regarded

as part of the manufacturing process and is normally carried out at the end of the process.

The following is necessary:
- a clear specification of the contents of the inspection, including frequency.
- a clear description on the assessment of the inspections.

Random testing of produced components is

a method of back up checking of measures taken during manufacturing and final inspections.

The following is necessary:
- Specification of procedures, periodicity, responsibilities, etc.
- Description of assessment of results

Depending on the range and intensity of the final inspections, the random testing can be regarded as part of the final inspection.

Instructions to be submitted to the installer of a lift shall at least include

a) documents in equivalence with EC-type examination certificate
b) instructions for installation, adjustment, maintenance, storage, etc. as appropriate
c) declaration of conformity

The system requires procedures allowing the supervision of the system from design to final inspection.

NB-LIFT	**NB-L CO-ORDINATION OF NOTIFIED BODIES LIFTS DIRECTIVE 95/16/EC**	**NB-L/REC 3/006 version: 07 date: 07-05-03**

NB-L RECOMMENDATION FOR USE

Keywords: **CAP; NB; Systems ; Design inspection**	**Proposed by NB-L on 98-12-11, Decided by NB-L/HC on 00-05-09, Modified by NB-L/HC on 01-07-05**
	StC: to be approved by WP X done on 07-04-23 by OP done on
related to Directive: 95/16/EC **Article: Annex: XIII Clause: 3.3**	**prEN/EN:** **Clause:**

Question:

When design inspections are necessary?

Answer:

A design inspection is necessary

- for deviations from aspects dealt with in harmonised standards, e. g. driving system, free spaces beyond the extreme positions of the car, etc. Those deviations may be needed for further installations due to technical progress or innovation or may be necessary in a specific case.

- if the design is based on additional aspects for a lift affecting the safe use of the installation, but not yet dealt with in an harmonised standard, e. g. accessibility for handicapped persons, explosive atmosphere, fire, vandal resistance, etc

The disign inspection is not only necessary for the parts/components deveating from the provisions of harmonised standards but also for parts being able to be influenced in their safety function by the deviations.

The design inspection may be not only a check of documentation but can also include examinations and/<or tests on site.

This REC will be altered with the progress of publication of harmonised standards in the filed of LD.

History: Prepared by NB-L/AH-QM on base of an order of NB-L/HC; consideration in the 6th NB-L/HC meeting; modified by NB-L/AH-QM; approved by NB-L/HC in its 7th meeting; refused by StC on 00-11-20; modified by NB-L/AH-QM; decided by NB-L/HC in its 9th meeting

According to the "Rules of Procedure", clause 2.7, it is expected that Notified Bodies take recommendations into consideration

NB-LIFT	**NB-L** **CO-ORDINATION OF NOTIFIED BODIES** **LIFTS DIRECTIVE** **95/16/EC**	**NB-L/REC 3/007** **version: 03** **date: 01-07-04**

NB-L RECOMMENDATION FOR USE

Keywords: CAP, NB, Systems, Modification	**Proposed by NB-L on 98-11-12,** **Decided by NB-L/HC on 00-01-19,** **Modified by NB-L/HC on**
	StC: to be approved **by WP X done on 00-12-31** **by OP ☐ done on**
related to Directive: 95/16/EC **Article: Annex: XIII Clause:**	**prEN/EN:** **Clause:**

Question:

How to handle modifications of an Annex XIII system?

Answer:

Within the handbook of an Annex XIII system there has to be a part describing the handling of modifications of the approved system. This description is containing the conclusion between the applicant and the approving NB about those modifications of which the NB needs to be informed and which of them need to be approved by the NB. By the way of the audits according to clause 4.3 or the unexpected visits laid down in clause 4.4 the NB is able to assure, that such a conclusion is not leading to misuse.

History: Prepared by NB-L/HC-QM on base of an order of NB-L/HC, decided in 6th NB-L/HC meeting, adopted by StC, editorially amended to new format of REC,

According to the "Rules of Procedure", clause 2.7, it is expected that Notified Bodies take recommendations into consideration

NB-LIFT	**NB-L CO-ORDINATION OF NOTIFIED BODIES LIFTS DIRECTIVE 95/16/EC**	**NB-L/REC 3/008 version: 08 date: 07-05-03**

NB-L RECOMMENDATION FOR USE

Keywords: **CAP, NB, Systems**	**Proposed by NB-L on 01-01-17, Decided by NB-L/HC on 00-05-09, Modified by NB-L/HC on 01-07-04**
	StC: to be approved by WP X done on 07-04-23 by OP done on
related to Directive: 95/16/EC **Article: 8 (2) Annex: XII, XIII,XIV Clause:**	**prEN/EN:** **Clause:**

Question:

The wording of Art. 8 (2) in combination with Annexes XII and XIV leads to the following questions:

a) What is the difference between Art. 8 (2) iii and v?
b) Which modifications are possible in the design of a lift within Art. 8 (2) iii-procedure?

Answer:

To a)

The conformity assessment procedures (CAP) for lifts are described in Article 8 (2). The annexes referred to in this article are giving additional provisions. In case of different wording between Art. 8 (2) and the annexes, Article 8 contains the leading wording.
Together with i and ii in Art. 8 (2), iii describes the possibility to carry out the CAP in two steps, where in the first step the compliance with a reference lift is proved, and in the second one the compliance of an installed lift with the reference lift is validated. In this CAP different organisations can be involved.
Together with iv in Art. 8 (2), v describes the CAP as a single step procedure, where only one organisation is involved.

To b)

Within Art. 8 (2) iii procedure, modifications not being in compliance with the reference lift are not allowed.

For carrying out the final inspection in this case the following is needed:
technical documentation in accordance with Annex VI and in addition

- in case of Art. 8 (2) iii, a copy of the certificate of approval for the Annex XIII system and a description of the design, comparable with that of Art. 8 (2) i, or
- in case of Art. 8 (2) i and ii, a copy of the type examination of a lift/ model lift

History: Prepared by NB-L/AH-QM on base of an order of NB-L/HC; consideration in the 6th NB-L/HC meeting; modified by NB-L/AH-QM; decided by NB-L/HC on 00-05-09; not approved by StC; reconsidered by NB-L/AH-QM; decided by NB-L/HC in its 9th meeting, editorially amended to new format of REC

According to the "Rules of Procedure", clause 2.7, it is expected that Notified Bodies take recommendations into consideration

NB-LIFT	**NB-L CO-ORDINATION OF NOTIFIED BODIES LIFTS DIRECTIVE 95/16/EC**	**NB-L/REC 3/009 version: 05 date: 07-05-03**

NB-L RECOMMENDATION FOR USE

Keywords: **CAP, NB, Systems, Certificate, Design inspection, Content of certificate**	**Proposed by NB-L on 98-11-12, Decided by NB-L/HC on 00-05-09, Modified by NB-L/HC on** **StC: to be approved by WP X done on 07-04-23 by OP done on**
related to Directive: 95/16/EC **Article: 8 (2) Annex: XIII Clause:**	**prEN/EN:** **Clause:**

Question:

What shall be the content of the EC-Design Inspection Certificate?

Answer:

The following minimum information shall be given in the EC-Design Inspection Certificate preferably in the given order:

1. Name and EC-identification number of the NB
2. Name and address of the holder of the certificate
3. Certification Number
4. Scope of approval
   - 4.1 Description of the deviation from harmonised standard
   - 4.2 Description of the alternative solution
5. Conditions of approval
6. Environmental conditions
7. Relation to assessment report
8. Tests and examinations to be carried out on site
9. Any additional information
10. Place, date, signature and name printed.

Notes:
1) The description of the deviation from harmonised standard may consist of the relevant clause(s) of the standard(s) concerned.
2) The description of the alternative solution shall consist at least of an detailed explanation of the function, drawings showing the essential details of the solution and the connection(s) to the other part(s) of the lift, electric/hydraulic schemes showing the connections to the electric/hydraulic diagram(s).
3) The description of the test(s) and examination to be carried out on site may be part of the instruction manual.

History: Proposal of NB-L/AH-FI; decided in 7th meeting of NB-L/HC, commented by StC, modified by NB-L, editorially amended to new format of REC, amended in the 11th meeting of NB-L (11.02)

According to the "Rules of Procedure", clause 2.7, it is expected that Notified Bodies take recommendations into consideration

	NB-L **CO-ORDINATION OF NOTIFIED BODIES** **LIFTS DIRECTIVE** **95/16/EC**	**NB-L/REC 3/010** **version 03** **date 17-07-2008**

NB-L RECOMMENDATION FOR USE

Keywords: Annex XI, random check, module c, safety components, verification, conformity to type	**Proposed by NB-L on 2007-11-21,** **Decided by NB-L/HC on 2007-11-21,** **Modified by NB-L/HC on -** **StC: to be approved** **by WP ☐ done on -** **by OP ☒ done on 28.04.2008**
related to Directive: 95/16/EC **Article: -** **Annex: XI** **Clause: -**	**prEN/EN:** **Clause:**

Question:

What has to be verified during a random check according to Annex XI?

Answer

The procedures and the tasks are described in the amended document:

"Guideline for checking the conformity of a safety component with the safety component described in the EC type certificate by random checking according to Annex XI (module C) of Directive 95/16/EC dated 29 June 1995, Revision October 2007" (Doc. No. NB-L/2007-26(2))

History: presented and approved at the 20th NB-L/HC meeting.

NB-LIFT	**NB-L COORDINATION GROUP OF NOTIFIED BODIES FOR LIFTS 2014/33/EU**	**NB-L/REC 3/004 Version: 06 Date: 13.09.2016**

RECOMMENDATION FOR USE

Keywords: **CAP, NB, Systems**		**Proposed by NB-L on 18.11.2015 Approved by NB-L on 18.11.2015** **Endorsed by Lifts Working Group on 30.06.2016**
Related to Directive: 2014/33/EU **Annex/Clause: VII, XI and others**	**Related to other directives:** **Annex/Clause:**	**EN/prEN:** **Annex/Clause:**

Question:

Which limitations of the approval of systems according to Annexes VI, VII, X, XI and XII are possible?

Answer:

Only product related limitations are possible.
The limitation can be based on the application or on findings of the notified body.

"Product related" means

limitation to a certain technology

a) in case of safety components
e. g. door locking devices, energy dissipation type buffers, etc.

b) in case of lifts
e. g. traction drive lifts, hydraulic lifts,
etc. or
in case of Annex XI systems limitations related to the competence of design, e. g.

- planning of lift installations in a building plus design of parts and components of lifts plus selection of parts and/or components from catalogs,
- design of parts and components of lifts plus selection of parts and/or components from catalogs
- selection of parts and/or components from catalogs."

See also REC 0/003 and 3/005.

History:

Prepared by the NB-L/HC-QM group on the basis of an order of NB-L; considered at the 5th NB-L meeting; modificated by the NB-L/AH-QM group; approved by the NB-L, endorsed by the StC.

Amended according to Directive 2014/33/EU at the 36th NB-L meeting, endorsed by the LWG on 30 June 2016

NB-LIFT	**NB-L COORDINATION GROUP OF NOTIFIED BODIES FOR LIFTS 2014/33/EU**	**NB-L/REC 3/005 Version: 08 Date: 13.09.2016**

RECOMMENDATION FOR USE

Keywords: **CAP, NB, Systems, Certificate, Content of certificate**		**Proposed by NB-L on 18.11.2015, Approved by NB-L on 18.11.2015** **Endorsed by Lifts Working Group on 30.06.2016**
Related to Directive: 2014/33/EU **Annex/Clause: VII, XI and others**	**Related to other directives:** **Annex/Clause:**	**EN/prEN:** **Annex/Clause:**

Question:

What shall be the content of a certificate, showing the approval of a system according to Annexes VI, VII, X, XI and XII issued by a Notified Body?

Answer:

The following minimum information shall be given in the certificate of approval preferably in the given order:

1. Name and EC-identification number of the NB
2. Name and address of the holder of the certificate
3. Certificate issued on the basis of Directive 2014/33/EU (lifts) Annex .....
4. Certification Number
5. Scope of approval
6. Relation to assessment report
7. Any additional information
8. Place, date, signature and name printed
9. Validity Period

In case of Annex XI certificate it shall be stated under "any additional information" that this system in its range of validity can also be used in the conformity assessment procedures according to Art. 16 (1) a, b or d.

History:

Prepared by the NB-L/HC-QM group on the basis of an order of NB-L; considered at the 6th NB-L meeting; modified by NB-L/AH-QM; decided on 00-05-09 by NB-L, endorsed by the StC.

Amended according to Directive 2014/33/EU at the 36th NB-L meeting, endorsed by the LWG on 30 June 2016.

According to the "Rules of Procedure", clause 2.7, it is expected that Notified Bodies take recommendations into consideration. Recommendations for Use, which have been endorsed by the Lifts Working Group become decisions according to 2014/33/EU, Article 24 (11).
It is in the responsibility of the user of this document, that its latest version is used.

NB-LIFT	**NB-L COORDINATION GROUP OF NOTIFIED BODIES FOR LIFTS 2014/33/EU**	**NB-L/REC 3/012 Version: 06 Date: 13.09.2016**

RECOMMENDATION FOR USE

Keywords: **CAP, final inspection, subcontracting**		**Proposed by NB-L on 18.11.2015 Approved by NB-L on 18.11.2015** **Endorsed by Lifts Working Group on 30.06.2016**
Related to Directive: 2014/33/EU **Annex/Clause: Art.16, Annex: X, XI, XII**	**Related to other directives:** **Annex/Clause:**	**EN/prEN:** **Annex/Clause:**

Question:

Is it allowed for an installer to subcontract the whole or part *of the* final inspection of an installed lift?

Answer:

Subcontracting the whole or a part of the final inspection of an installed lift under Annex X, XI and XII is possible, but the installer is responsible for the total process of final inspection.

The installer shall have a proper procedure regarding requirements including reliability, competence and independence of the subcontractor.

The installer shall provide proper instructions and clearly define the work to be carried out. The installer shall assess the work carried out by the subcontractor.

The notified body assessing the quality system shall check that this procedure has been implemented and followed.

History:

Matter discussed and approved at the 23rd NB-L meeting, discussed again and approved at the 24th NB-L meeting, endorsed by the StC.

Amended according to Directive 2014/33/EU at the 36th NB-L meeting, endorsed by the LWG on 30 June 2016.

According to the "Rules of Procedure", clause 2.7, it is expected that Notified Bodies take recommendations into consideration. Recommendations for Use, which have been endorsed by the Lifts Working Group become decisions according to 2014/33/EU, Article 24 (11).
It is in the responsibility of the user of this document, that its latest version is used.