PAS 32-1:1999

Specification for examination and test of new lifts before putting into service —

Part 1: Electric tractor lifts

ICS 91.140.90

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Contents

	Page
Foreword	ii
1 Scope	1
2 Risk assessment	1
3 Test documentation	1
4 Test and examination	1

Foreword

Lifts Directive 95/16/EC requires the installer of a lift to take responsibility for its design, manufacture, installation and placing upon the market.

For conformity assessment the Directive requires that before placing upon the market and putting into service a lift shall have undergone certain procedures including inspection and test.

The inspection and test procedures may be undertaken by the installer provided that:

a) the installer can demonstrate the necessary expertise by having an appropriate quality assurance system; and either

b) the lift conforms to a harmonized standard; or

c) the lift has an EC Design Examination Certificate from a Notified Body.

The level of quality assurance may vary in accordance with which conformity assessment route applies, i.e. ISO 9001, ISO 9002 or ISO 9003.

This specification provides tests and examination requirements deemed to ensure conformity to BS EN 81-1:1998. It does not cover every clause in BS EN 81-1:1998 as many requirements are covered by the installer's quality control procedures.

This specification does cover the tests in annex D of BS EN 81-1:1998, as well as tests that do not fall within the installer's quality control system; for example, the depth of the pit to ensure conformity to arrangement drawings.

It is recognized that certain tests/checks can be carried out more effectively before installation, and that others should only be made on-site unless it can be demonstrated by a quality control procedure and risk assessment that they can be performed with equal effectiveness off-site. Answer boxes in this specification that contain a shaded square imply that the test should be carried out on-site.

This specification does not carry the full force of a British Standard but is intended for use as a guidance document.

This specification omits some of the tests specified in BS 5655-10, but includes some new tests as well as the tests specified in annex D of BS EN 81-1:1998.

It is intended to review this specification in July 2000.

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This publication does not purport to include all the necessary provisions of a contract. Users are responsible for its correct application.

Compliance with a Product Assessment Specification does not of itself confer immunity from legal obligations.

Summary of pages

This document comprises a front cover, an inside front cover, pages i and ii, pages 1 to 28, an inside back cover and a back cover.

1 Scope

This Product Assessment Specification (PAS) specifies requirements for testing, examination and recording results for new electric traction lifts conforming to BS EN 81-1:1998, before putting into service.

2 Risk assessment

The purpose of this PAS is to ensure that the safety requirements of BS EN 81-1:1998 are complied with and that the associated risks are addressed. This PAS does not contain its own risk assessment but utilizes the risk assessment in BS EN 81-1:1998.

3 Test documentation

The following documents are required for the tests and examination to be carried in accordance with annex C of BS EN 81-1:1998:

— general arrangement drawing;
— electrical schematic drawing;
— copies of test certificates;
— copy of Quality Assurance Certificate (if applicable) covering design and manufacture;
— Notified Body approvals (if applicable).

4 Test and examination

The test and examination shall be carried out in accordance with Table 1. To ensure conformity to BS EN 81-1:1998 all questions should be answered. Some sections may be completed at different stages during the manufacture, installation and test.

NOTE Test methods are detailed in annex D of BS EN 81-1:1998.

Table 1. Result of test and examination for electric passenger and goods/passenger lifts

1.0 Basic characteristics

Location

Installer

Layout drawing Reference No.

Lift serial number

Length of travel (m)

Installer type reference

Number of levels served

Total.

Front.

Rear.

Side.

Power supply

Voltage. (V)

Phases.

Frequency. (Hz)

Wire 3/4 or 5?

Rated load. (Kg).

Persons.

Rated Speed. (m/s)

Location of machine room

Above well

Below well

At side

Is the above in accordance with information on the layout drawing / wiring diagram or the other information sheets?

Yes

Table 1. Result of test and examination for electric passenger and goods/passenger lifts (*continued*)

2.0 Machine and pulley room

2.1 Main switch

Does the installed main switch conform to the specification? Specified (A) ☐ Yes ☐

Is the main switch control mechanism easily identifiable and accessible from the machine room doorway? (See **13.4.2** of EN 81-1:1998) Yes ☐

Is the main switch lockable in the OFF position? (See **13.4.2** of EN 81-1:1998) Yes ☐

2.2 Lighting

Does this conform to **6.3.6** of EN 81-1:1998? Yes ☐ ☐ lux.

2.3 Dimensions

Are the dimensions the minimum specified in **6.3.2** of EN 81-1:1998? Yes ☐

2.4 Access

Is there safe access as defined in **6.2** of EN 81-1:1998? Yes ☐

2.5 Safety signs

Are notices and signs in place in accordance with **15.4** of EN 81-1:1998? Yes ☐

2.6 Machine type

Is the correct machine supplied? Specified ☐ Yes ☐

2.7 Controller type

Is the correct type of controller supplied? Specified ☐ Yes ☐

Table 1. Result of test and examination for electric passenger and goods/passenger lifts (*continued*)

2.0 Machine and pulley room (*continued*)

2.8 Emergency release

Does the emergency operation system(s) function correctly as specified in **12.5** of EN 81-1:1998?		Yes ☐
Are the instructions specified in **15.4.3** of EN 81-2 displayed?		Yes ☐

2.9 Machine room ventilation

Is the machine room ventilated as specified in **6.3.5** of EN 81-1:1998?		Yes ☐

2.10 Doors/trap doors

Are the machine room doors or trap doors fitted with a lock conforming to **6.3.3.3** of EN 81-1:1998?		Yes ☐

2.11 Communication

Is there a communication device in place and working as specified in **14.2.3.4** of EN 81-1:1998?	N/A ☐	Yes ☐

Table 1. Result of test and examination for electric passenger and goods/passenger lifts (*continued*)

3.0 Well

3.1 Clearance and run-bys

a) Is the slowdown of the machine monitored? (See **5.7.1.3** and **12.8** of EN 81-1:1998) N/A ☐ Yes ☐

b) Is there an anti-rebound device fitted? (See **5.7.1.4** of EN 81-1:1998) N/A ☐ Yes ☐

NOTE In c) and d), $h = 0.035v^2$. This may be reduced if conditions conforming to **5.7.1.3** and **5.7.1.4** of EN 81-1:1998 apply.

c) With the counterweight resting on its fully compressed buffers, confirm, with reference to Figure 1, that:

i) the rail lengths can accommodate a further travel of at least (0.1 + h) m [see **5.7.1.1**a) of EN 81-1:1998] Specified ☐ m Actual (Distance) ■

ii) the dimension of the standing area on the car roof to the first striking point above is at least (1.0 + h) m (see **5.7.1.1**.b of EN 81-1:1998) Specified ☐ m Actual ■

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)] is at least (0.3 + h) m [see **5.7.1.1**c)1) of EN 81-1:1998] Specified ☐ m Actual ■

iv) the free vertical distance between the lowest part of the ceiling and the highest part of the guide shoes/rollers, rope attachments, header or parts of vertically sliding doors is at least (0.1 + h) m [see **5.7.1.1**c)2) of EN 81-1:1998] Specified ☐ m Actual ■

Table 1. Result of test and examination for electric passenger and goods/passenger lifts (*continued*)

3.0 Well (*continued*)

Is there sufficient space above the car to accommodate, resting on one face, a rectangular block 0.5 m × 0.6 m × 0.8 m? [See **5.7.1.1**d) of EN 81-1:1998]

Yes ☐

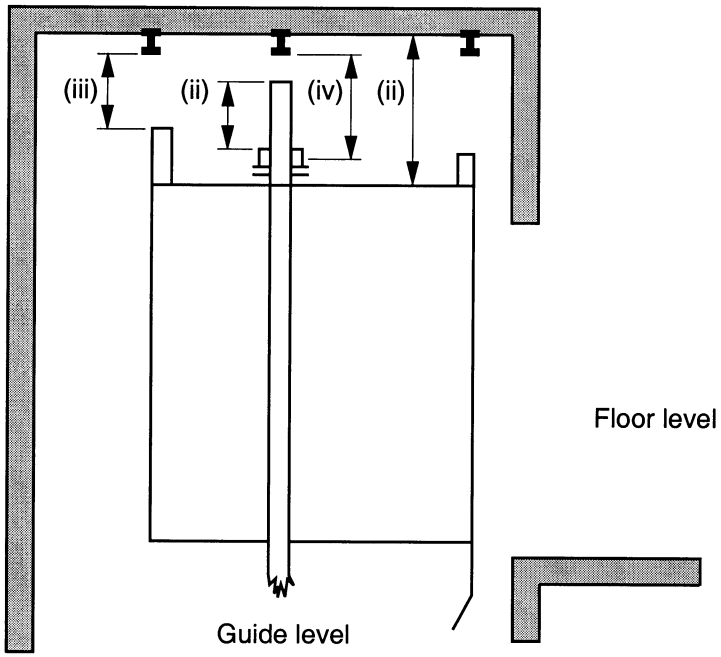

Figure 1 — Overhead clearances

d) With the car resting on its fully compressed buffers, is the further guided travel of the counterweight at least (0.1 + *h*) m (see **5.7.1.2** of EN 81-1:1998)

Yes ☐

Distance

Actual ☐

Table 1. Result of test and examination for electric passenger and goods/passenger lifts (*continued*)

3.0 Well (*continued*)

		Distance
e) With the car resting on its fully compressed buffers, confirm, with reference to Figure 2, that:		
i) there is sufficient space below the car to accommodate, resting on one face, a rectangular block 0.5 m × 0.6 m × 1.0 m [see **5.7.3.3**a) of EN 81-1:1998]	Yes ☐	
ii) there is a free vertical space between the bottom of the pit and the lowest part of the car [excluding the area in iii)] of at least 0.5 m [see **5.7.3.3**b) of EN 81-1:1998]	Yes ☐	☐ m
iii) there is a free vertical distance of not less than 0.1 m within a horizontal distance of 0.15 m 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 81-1:1998]	Yes ☐	☐ m
iv) except for the items in iii), there is a free vertical distance between the highest parts in the pit and the lowest part of the car of at least 0.3 m [see **5.7.3.3**c) of EN 81-1:1998]	Yes ☐	☐ m

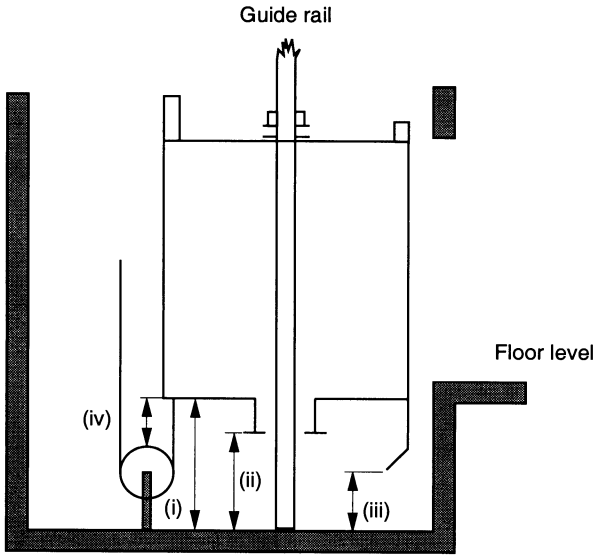

Figure 2 — Bottom clearances

Table 1. Result of test and examination for electric passenger and goods/passenger lifts (*continued*)

3.0 Well (*continued*)

3.2 Reduced stroke buffering	N/A ☐
Does the terminal speed reduction system ensure that the buffer impact speed is appropriate to the stroke of the buffer? (See **10.4.3.2** of EN 81-1:1998)	Yes ☐
3.3 Buffers	
a) Car buffers	
Do the car buffers conform to those specified?	Specified Type ☐ No. ☐ Yes ☐
3.3.1 Energy accumulation buffers (linear type)	N/A ☐
With the car and its rated load placed on the buffer(s), and the ropes slack, does the compression correspond to that given by the characteristic curve of the buffer (as provided by the buffer or lift supplier)? (See **D.2.1** of EN 81-1:1998)	Yes ☐
3.3.2 Energy accumulation buffers (non-linear type)	N/A ☐
Is the buffer CE marked?	Yes ☐
3.3.3 Energy dissipation buffers (oil type)	N/A ☐
With the car and its rated load brought into contact with the buffer at the buffer design speed (see **10.4.3** of EN 81-1:1998) confirm that there is no deterioration to the lift or buffer	Yes ■
Is the buffer CE marked?	Yes ☐

Table 1. Result of test and examination for electric passenger and goods/passenger lifts (*continued*)		
3.0 Well (*continued*)		
b) Counterweight buffers Do the counterweight buffers conform to those specification?	Specified Type	Yes ☐
3.3.4 Energy accumulation buffers (linear type)	N/A ☐	
With the counterweight and empty car placed on the buffer(s), and the ropes slack, does the compression correspond to that given by the characteristic curve of the buffer (as provided by the buffer or lift supplier)? (See **D.2.1** of EN 81-1:1998)		Yes ☐
3.3.5 Energy accumulation buffers (non-linear type)	N/A ☐	
Is the buffer CE marked?		Yes ☐
3.3.6 Energy dissipation buffers (oil type)	N/A ☐	
With the counterweight and empty car brought into contact with the buffer at the buffer design speed (see **10.4.3** of EN 81-1:1998), confirm that no deterioration occurs to the lift		Yes ■
Is the buffer CE marked?		Yes ☐
3.4 Protection in the well		
a) Is there a rigid counterweight screen fitted? (See **5.6.1** of EN 81-1:1998)		Yes ■
b) For adjacent lifts, is there a screen in the pit extending 2.5 m above the lowest landing? (See **5.6.2.1** of EN 81-1:1998)	N/A ☐	Yes ■
c) If the distance between the moving parts of adjacent lifts is less than 0.5 m, is there a full screen height? (See **5.6.2.2** of EN 81-1:1998)	N/A ☐	Yes ■

Table 1. Result of test and examination for electric passenger and goods/passenger lifts (*continued*)

3.0 Well (*continued*)

d) Do the inspection doors and inspection traps conform to **5.2.2** of EN 81-1:1998?	N/A ☐	Yes ■
e) Does the access to the pit conform to **5.7.3.2** of EN 81-1:1998?		Yes ■
f) For partially enclosed wells, is there screening conform to Figure 1 of EN 81-1:1998?	N/A ☐	Yes ■
g) Are all the other requirements of 5.2.1.2 of EN 81-1:1998 conformed to?		

3.5 Landing door assemblies

a) Is the running clearance between door panels, and between panels and uprights, lintels and sills 6 mm or less? (See **7.1** of EN 81-1:1998)		Yes ☐
b) Confirm that no recess or projection on the face of sliding door panels exceeds 3 mm (see **7.5.1** of EN 81-1:1998)		Yes ☐
c) Is there a fire test certificate available and in order (if required)?	N/A ☐	Yes ☐
d) Are the landing doors correctly fire rated for the installation?	Specified Type ☐ Rating Min. ☐	Yes ☐
e) Are glass panels (if any) correctly marked in accordance with **7.2.3.5** of EN 81-1:1998?	Specified ☐	Actual ☐
f) Has one of the options for child protection in **7.2.3.6** of EN 81-1:1998 been adopted?	N/A ☐	Yes ☐

3.6 Landing door locks

a) Are the correct door locks fitted?	Specified ☐	Yes ☐
b) Are all door locks CE marked?		Yes ☐

Table 1. Result of test and examination for electric passenger and goods/passenger lifts (*continued*)

3.0 Well (*continued*)

3.7 Lighting

Does the lighting level in the well conform to **5.9** of EN 81-1:1998? Yes ☐ Actual ☐ lux.

3.8 Car and counterweight guide rails

a) Does the designation of the guide rails conform to that specified?	Car	Specified		Actual	
	Counterweight	Specified		Actual	
b) Does the pitch of the rail fixings conform to the layout drawing?	Car	Specified		Actual	
	Counterweight	Specified		Actual	

Table 1. Result of test and examination for electric passenger and goods/passenger lifts (*continued*)

4.0 Car, inspection operation and entrance clearances

4.1 The car

a) What is the weight of the empty car? Specified ☐ Kg Actual ☐ Kg

b) Does the available floor area, related to rated load and maximum number of passengers, conform to **8.2** of EN 81-1:1998? Specified ☐ Actual ☐

c) Is each glass panel (if used) marked as specified in **8.3.2.4** of EN 81-1:1998?

1) Doors Specified ☐ Actual ☐

2) Walls Specified ☐ Actual ☐

d) Has one of the options for child protection in **8.6.8** of EN 81-1:1998 been adopted? N/A ☐ Yes ☐

e) Is the maximum load indicated in the car (i.e. no. of persons, load in kg and identification no.), and does it conform to **15.2.1** of EN 81-1:1998? Yes ☐

f) Does the emergency alarm device allow two-way communication with a rescue service as specified in **14.2.3.3** of EN 81-1:1998? Yes ■

g) Does the car and emergency lighting conform to **8.17** of EN 81-1:1998? Yes ☐ ☐ lux

h) Does the car overload device operate as specified in **14.2.5** of EN 81-1:1998? Yes ■

i) Does the apron conform to **8.4** of EN 81-1:1998? Yes ☐

j) Do emergency doors or trap doors conform to **8.12** of EN 81-1:1998? N/A ☐ Yes ☐

Table 1. Result of test and examination for electric passenger and goods/passenger lifts (*continued*)

4.0 Car, inspection operation and entrance clearances (*continued*)

4.2 Car top

a) Does the car top conform to **8.15** of EN 81-1:1998? Yes ☐

b) Does the car top station conform to **14.2.1.3** of EN 81-2 in construction and operation, and in neutralizing of other controls? Yes ☐

c) Does the alarm device as specified in **5.10** of EN 81-1:1998 operate correctly? N/A ☐ Yes ☐ Specified ☐

d) Does the balustrade on the car roof conform to **8.13.3** of EN 81-1:1998? Yes ☐ N/A ☐

4.3 Car entrance clearances

a) Is the running clearance between door panels, and between panels and uprights, lintels and sills 6 mm or less? (see **8.6.3** of EN 81-1:1998) Yes ☐

b) Confirm that no recess or projection on the face of sliding door panels exceeds 3 mm (see **8.7.1** of EN 81-1:1998) Yes ☐

c) Is the horizontal distance between the sill of the car and the sill of the landing doors 35 mm or less? (See **11.2.2** of EN 81-1:1998) Yes ☐

d) Is the distance between the inner surface of the well and the sill or framework of the car entrance or door 0.15 m or less, or 0.2 m if over a height not exceeding 0.5 m? (See **11.2.1** of EN 81-1:1998) Yes ☐ No ☐

e) If the answer to d) is NO, does the car door mechanically lock when out of the unlocking zone, as specified in **11.2.1**c) of EN 81-1:1998? N/A ☐ Yes ☐

Table 1. Result of test and examination for electric passenger and goods/passenger lifts (*continued*)

4.0 Car, inspection operation and entrance clearances (*continued*)

4.4 Landing and car door tests

NOTE If appropriate, the tests in 4.4 should be carried out with the car and landing doors coupled.

If the doors are manual	☐	check f), h), i), j), k), m), n), o), p)	
If the doors are power operated	☐	answer all except p)	
a) Is the force to prevent closing 150 N or less? (See **7.5.2.1.1.1** and **8.7.2.1.1.1** of EN 81-1:1998)			Yes ☐
b) With a mechanical force of 150 N, confirm that the clearances specified in **7.1** of EN 81-1:1998 do not exceed 30 mm for side opening doors or 45 mm for centre opening doors (see **7.2.3.2** of EN 81-1:1998)			Yes ☐
c) Is the kinetic energy 10 J or less? (See **7.5.2.1.1.1** and **8.7.2.1.1.2** of EN 81-1:1998)			Yes ☐
d) Do all the protective devices reverse the doors as specified in **7.5.2.1.1.3** and **8.7.2.1.1.3** of EN 81-1:1998?			Yes ☐
e) If the doors are able to close with the reversal device inoperative, is the kinetic energy no more than 4 J? (See **7.5.2.1.1.3** and **8.7.2.1.1.3** of EN 81-1:1998)		N/A ☐	Yes ☐
f) Is the unlocking zone 0.2 m or less above or below landing levels (or 0.35 m for simultaneously operated car and landing doors)? (See **7.7.1** of EN 81-1:1998)			Yes ☐
g) Does the automatic mechanical self-closing mechanism on each set of doors function correctly? (See **7.7.3.2** of EN 81-1:1998)			Yes ■
h) Can each set of landing doors be unlocked from outside, with an emergency key? (see **7.7.3.2** of EN 81-1:1998)			Yes ☐

Table 1. Result of test and examination for electric passenger and goods/passenger lifts (*continued*)

4.0 Car, inspection operation and entrance clearances (*continued*)

i) Can the car doors be manually opened within the unlocking zone with a force of less than 300 N with the power off? (See **8.11.2** of EN 81-1:1998)		Yes ☐
j) Is the maximum force to prevent opening of folding doors 150 N? (See **8.7.2.1.1.4** of EN 81-1:1998)	N/A ☐	Yes ☐
k) Do vertically sliding doors conform to **7.5.2.2**a), b) and d), and **8.7.2.2**b), c) and e), of EN 81-1:1998?	N/A ☐	Yes ☐
l) Do the contacts at each landing entrance stop and prevent movement of the car outside unlocking zone when broken? (See **7.7.4** of EN 81-1:1998)		Yes ■
m) Are the mechanical locks at each landing entrance proved for positive locking? (See **7.7.5** of EN 81-1:1998)		Yes ■
n) Does the car door lock function correctly (if fitted)? (See **8.9.3** of EN 81-1:1998)	N/A ☐	Yes ■
o) Is there no car movement outside the locking zone when the car door/gate contacts are broken? (See **8.9** of EN 81-1:1998)		Yes ■
p) Does the "car here" indicator conform to **7.6.2** of EN 81-1:1998, for manual doors?	N/A ☐	Yes ☐

Table 1. Result of test and examination for electric passenger and goods/passenger lifts (*continued*)

5.0 Suspension, compensation, braking, and traction

5.1 Suspension

a) Suspension ropes

1) Number — Specified [ ]

2) Nominal diameter — Specified [ ] mm

3) Lay and construction — Specified [ ]

4) Are the correct ropes supplied and is the test certificate available and in order? (A copy is sufficient as the original is held by the rope maker) — Yes [ ]

Rope anchorages:

5) Type of termination — Car [ ] Counterweight [ ] Suspension Points [ ]

6)) Are the rope terminations correctly made and secure as specified in **9.2.3** and **9.2.4** of EN 81-1:1998? — Yes [■]

7) Do the rope terminations conform to **9.5** of EN 81-1:1998, ensuring distribution of load between the ropes? — Yes [ ]

5.2 Compensation

a) Is compensation required? — Yes [ ] No [ ]

b) If a) is YES, is the compensation of the correct type? — Specified [ ] Actual [ ]

Table 1. Result of test and examination for electric passenger and goods/passenger lifts (*continued*)

5.0 Suspension, compensation, braking, and traction (*continued*)

5.3 Traction/braking checks

a) Does the car stop in the following emergency conditions?

1) With the car empty and travelling upwards at rated speed, in the upper part of the well? [See **D.2**h)1)a) of EN 81-1:1998] Yes ☐

2) With the car loaded to 125 % and travelling downwards at rated speed, in the lower part of the well? [See **D.2**h)1)b) of EN 81-1:1998] Yes ☐

b) Do the ropes slip when the counterweight is brought into contact with the buffer? [See **D.2**h)2) of EN 81-1:1998] Yes ☐

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

c) Is the balance correct? [See **D.2**h)3) of EN 81-1:1998] Specified ☐ Yes ☐

Table 1. Result of test and examination for electric passenger and goods/passenger lifts (*continued*)

6.0 Safety contacts and circuits		
a) Are the final limit switches positioned and operating correctly? (See **10.5** of EN 81-1:1998)		Yes ☐
b) Do the stopping devices on the car top, and (if required) in the car, pulley room, and pit, stop and prevent movement of the car when operated? (See **5.7.3.4**, **6.4.5**, **8.15**, and **14.2.2.1** of EN 81-1:1998)		Yes ☐
c) Has the safety chain been tested to ensure that an earth fault at the most remote safety contact causes immediate disconnection? [See **14.1.1.1**d) of EN 81-1:1998}		Yes ☐
d) Does the phase reversal protection function correctly? [See **14.1.1.1**j) of EN 81-1:1998]		Yes ☐
e) Confirm the levelling and relevelling circuits operate (see **14.2.1.2** of EN 81-1:1998)	N/A ☐	Yes ☐
f) Does the docking operation function as specified in **14.2.1.5**b) of EN 81-1:1998?	N/A ☐	Yes ☐
g) Do all electrical safety devices on the landing door panels that are not directly mechanically linked operate correctly? (See **7.7.6.2** of EN 81-1:1998)	N/A ☐	Yes ☐
h) For two rope suspension, does the slack rope safety device operate correctly? (See **9.5.3** of EN 81-1:1998)	N/A ☐	Yes ☐
i) Does the electrical safety device on the anti-rebound device operate correctly? (See **9.6.2** of EN 81-1)	N/A ☐	Yes ☐
j) Does the electrical slow-down system operate correctly, including any non-electrical device? [See **12.8.4**c)of EN 81-1:1998]	N/A ☐	Yes ☐

Table 1. Result of test and examination for electric passenger and goods/passenger lifts (*continued*)

6.0 Contacts and circuits (*continued*)

k) Does the stopping device in the car operate correctly? [See **14.2.1.5**i) of EN 81-1:1998]	N/A ☐	Yes ☐
l) Do all other switches/contacts in safety devices stop and prevent movement of the car when operated? (See annex A of EN 81-1:1998)		Yes ☐

Table 1. Result of test and examination for electric passenger and goods/passenger lifts (*continued*)

7.0 Car and balancing weight safety gear and over-speed protection (*continued*)

7.1 Car safety gear

a) Is the correct safety gear supplied?

Progressive - Specified ☐ Actual ☐

Instantaneous- Specified ☐ Actual ☐

b) Is the safety gear CE marked? Yes ☐

c) Does the safety gear stop 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? [See **D.2**j)1) of EN 81-1:1998] N/A ☐ Yes ☐

— 125 % of rated load at rated speed or lower, for progressive safety gear? [See **D.2**h)2) of EN 81-1:1998] N/A ☐ Yes ☐

d) Is the floor of the lift car sloping no more than 5 % from horizontal? (See **9.8.7** of EN 81-1:1998) Yes ☐

e) After the test, confirm that no deterioration that could aversely affect normal use of the lift has occurred [see **D.2**j) of EN 81-1:1998] Yes ☐

Table 1. Result of test and examination for electric passenger and goods/passenger lifts (*continued*)

7.0 Car and balancing weight safety gear and over-speed protection (*continued*)

7.2 Car governor

a) Is the correct governor installed? Specified ☐ Actual ☐

b) Is the governor CE marked? Yes ☐

c) Does the electrical safety device stop the lift? Yes ☐

d) Is the governor sealed (if adjustable)? N/A ☐ Yes ☐

e) Is the correct rope type supplied? Specified ☐ Yes ☐

7.3 Counterweight safety gear N/A ☐

a) Is the correct safety gear installed? Progressive - Specified ☐ Actual ☐

Instantaneous- Specified ☐ Actual ☐

b) Is the safety gear CE marked? Yes ☐

c) Does the safety gear stop the counterweight when operated and engaging at appropriate speed, with the car empty, at the following? Yes ☐

— at rated speed, for instantaneous safety gear? [See **D.2**k)1) of EN 81-1:1998] N/A ☐ Yes ☐

— at rated speed or lower, for progressive safety gear? [See **D.2**k)2) of EN 81-1:1998] N/A ☐ Yes ☐

d) After the test, confirm that there is no deterioration that could adversely affect normal use of the lift [see **D.2**k) of EN 81-1:1998] Yes ☐

Table 1. Result of test and examination for electric passenger and goods/passenger lifts (*continued*)

7.0 Car and balancing weight safety gear and over speed protection (*continued*)

7.4 Counterweight governor			N/A	☐
a) Is the correct governor installed?	Specified	☐	Actual	☐
b) Is the governor CE marked?			Yes	☐
c) If fitted, does the electrical safety device stop the lift?			Yes	■
d) Is the governor sealed (if adjustable)?	N/A	☐	Yes	☐
e) Is the correct rope type supplied?	Specified	☐	Yes	☐
7.5 Ascending car protection				
a) Is the correct ascending car overspeed protection provided? (See **9.10** of EN 81-1:1998)	Specified	☐	Yes	☐
b) Is the protective device CE marked?			Yes	☐
c) Does the device function correctly, with the car ascending at at least 115 % of rated speed? (See **9.10.1** of EN 81-1:1998)			Yes	■

Table 1. Result of test and examination for electric passenger and goods/passenger lifts *(continued)*

8.0 Measurement system parameters

a) Check the mains current (running with full load up) to ensure that it is within the specified limit [see **D.2**d) of EN 81-1:1998]

Specified _____ A Actual _____ A

b) Measure and record the following speeds when the car is at mid-point of travel [see **D.2**e) of EN 81-1:1998]

Car loading condition		Lift speed m/s	Levelling Speed * m/s	Re - levelling/ speed m/s	Inspection Speed 0.63 m/s max. m/s	Emergency Operation Speed m/s	Docking Operation Speed 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						
	down						
Balanced	up						
	** down						
Rated	up						
	down						

* With advance door opening.

** The balanced load down speed should be within + 5 % of the rated speed.

c) Do the measured balanced load down speeds conform to **12.6** of EN 81-1:1998?

Yes ☐

d) Does the maximum levelling deviation conform to within the manufacturer's tolerances?

Specified _____ Actual _____

Table 1. Result of test and examination for electric passenger and goods/passenger lifts (*continued*)

9 Protective devices

9.1 Lift motor windings		
Is motor protection provided? (See **13.3** of EN 81-1:1998)	N/A ☐	Yes ☐
9.2 Door motor winding		
Is motor protection provided? (See **13.3** of EN 81-1:1998)	N/A ☐	Yes ☐
9.3 Main power convertor		
Is protection provided? (See **13.3** of EN 81-1:1998)	N/A ☐	Yes ☐
9.4 Motor run time limiter		
Is the correct motor run time limiter supplied? (See **12.10** of EN 81-1:1998)		Yes ☐

Table 1. Result of test and examination for electric passenger and goods/passenger lifts (*continued*)	
10 Electrical wiring examination	
10.1 Insulation resistance to earth Does the insulation resistance to earth for the electrical system conform to **13.1.3** of EN 81-1:1998? [See also **D.2**f)1) of EN 81-1:1998]	Yes ☐
10.2 Earthing Is all metal work correctly earthed back to the main earthed isolator? [See **D.2**f)2) of EN 81-1:1998]	Yes ■
10.3 Electrical wiring a) Do the electrical conductors, including travelling cables, conform to **13.5** of EN 81-1:1998?	Yes ☐
b) Is the wiring installed (for EMC compliance) in accordance with the manufacturer's instructions?	Yes ■

Table 1. Result of test and examination for electric passenger and goods/passenger lifts (*continued*)

11 Documentation	
Is there a register conforming to **16.2** of EN 81-1:1998?	Yes ☐
Is there an instruction manual conforming to **16.3** of EN 81-1:1998?	Yes ☐

Table 1. Result of test and examination for electric passenger and goods/passenger lifts (*continued*)

12 Confirmation of conformity to EN 81-1

a) Are all the items associated with the installation, for which the lift manufacturer is not responsible, in a suitable state for the installation to be put into service?

Yes ■ No ☐

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

If NO, provide details:

b) Does the lift conform to EN 81-1?

Yes ■ No ☐

If NO, state the reasons [which may include Notified Body approval having been obtained (Design Examination Certificate) for any deviations from the standard for which additional/alternative tests may be required, and of which the results should be attached to the present test results]

c) Have all the questions been answered?

Yes ☐ No ☐

If NO, state reasons:

Table 1. Result of test and examination for electric passenger and goods/passenger lifts (*continued*)

12 Confirmation of conformity to EN 81-1 (*continued*)

Signature		Name (In capitals)		Position	
Company		Date			

Place of signature

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