

Traction Passenger Lifts
Test Documentation Check List for New Installations:
(Complying with the Building Act D2/AS1 Acceptable Solution)

Consent No:

Building Detail:

Equipment:

Item :	Ckd	Dwg No.	Type	Provider
PS1 Mfg Design Stmt, Certs, or PS2.			Stmt	
Lift Particular Sheet			List	
Layout.			Dwg	
Engineers Certificate for Shaft.			Stmt	
Annual WOF Check List		SS8/1	Gen	
Maintenance Schedule & Freq.			List	
As Built Drawings.			Man	
Electrical Control Schematics.			Dwg	
Rope Certificate.			Cert	
Copy Elect Certificate. Comp.			Cert	
Site Welding Certificate.			Cert	
PS3 Installers Prod Stmt Constr.			Stmt	
PS4 Test Check List - PStatement.			Stmt	

The documents have been sighted and copies recorded where necessary in compliance with the TA's requirements under the Building Act.

CBIP Level 2 Lift Inspector

Robert D. Johnston. CBIP level 2 2325:2005 full name & no.

Checked as Complete: Date / /
signature

Installation Test Check List:

	Equipment to Check	Codes	Results and Comments	Chkd	Fix
1	Pit Access	11.5 11.5.3 - D1	Inspection door - min 1.965h Dead latch - open out - interlock Ladder access within 900 of jamb - side. within 750 of jamb - front		
2	Level & Impervious to Water	11.9	Covered sump required. Sump to open drain or pump. min.50.-non-return valve.		
3	Car on Compressed Buffer.	9.1	Clear space to exist 0.45x 0.6x 1.37m. or 5.0mx 0.6mx 1.29m. Mech. clearance 50mm If < 1.4m x 0.5m, define area clearly.		
4	Light & Power	11.6- 11.10	Light switch at entrance.		
5	Buffers.	9.2 10.1 10.4.1- .5.1 10.4.2 10.5.2 table 10.5 68.3 10.5.6	Car buffer clearance - Spring. >300 <600 - Oil >230 <600 Upto 0.4m/s - solid. Over 1.0m/s oil. Label to show stroke & load rating. Spring Stroke .>0.4 to #0.5 38mm >0.5 to 0.75 63mm >0.75 to 1.0 100mm Oil buf.stroke. 1.0m/s 67mm 1.5m/s 152mm Buffer return within 90sec. Fluid level easily checked.		
6.	Counterweight Buffer Clearance. (R = 6.5 x rope length x rope ratio)	9.4	Max. < R + 460mm Min. Spring = R + 300 Oil = R + 230		
6	Limit Switches.	27.1 27.2	Direct mechanical operation.Metal cams. Independent to other stopping means. Remain operated until O/T.		
7	Bottom Final Limit Switch. (OT)	27.3.4	Spring Buffers - Max 225mm from f/l. Oil - Max 50% stroke +225 -Max.900mm To be pinned.		
8.	Counterweight Screen	19.3 15.2(b) 15.2(d)	2.0m above pit floor. highest comp bufr. Car clearance \$ 40 Counterweight screen clearance \$ 50		
10.	Governor Idler Sheave.	30.9	Nip points. Rope retainer guards 1 per 30E of wrap.		
11	Pit switch.	11.7 26.7	Accessible from entry. Conspicuous, marked "Emergency Stop"		
12.	Elevated Equipment Access	11.12	>2.5m or oil check >2.0m.		

Installation Test Check List:

	Equipment to Check	Codes	Results and Comments	Chkd	Fix
1.	Examine documents.	1.5 24.25	Log Book, Maintenance frequency. IQPtests - CS8/1 or other. Circuit diagrams in M/R.		
2.	Verify document to component.	2.6	Design Approval or documents.		
3.	Verify installed to design approval.		Complete this installation check list.		
4.	Security of landing doors.	13.3.1 13.3.2	Fire rated if necessary. Max. recesses 4mm vision panels Indentations max.1mm		
5.	Electrical safety devices.	60.2	Top OT. Up direction limit. Locks. Control fuse check. Car Gate. Trap door. Roof emergency stop. Slack rope. Safety gear switch. Pit emergency stop. Buffer extension switch. Governor tension sheave. Down direction limit. Bottom OT. Governor electrical trip.		
6.	Rope suspensions.	17.3 17.5 17.6 17.7	Eyebolts to BS 4278 Sockets to AS 173.2 and BS 463 Bull dog grips. Spacing, right application Babbit - Rose proud. Double nuts and cotter pins. Spring equalisers at one end.		
7.	Motor full load current.		amps.		
8.	Earthing.	26.4(c)	lock fuse.		
9.	Overspeed governor test.	67.2.2	Check trip speeds. Label. Rope size.		
10.	Car Safety Gear.	67.2.3 67.3 67.4 table 29.4	Check safety gear switches. Test - rated load & rated speed # 0.5m/s. Test - trip speed & rated load > 0.5m/s slide check. Car with 20mm out of true.		
11.	Buffer test.	68	Check oil level. Full load. full speed.		
12.	Motor and phase loss protection.	26.2			
13.	Suicide Field check.	26.4(d)	MG only.		
14.	Dynamic Braking.	26.4(f)	Geared 0.25m/sec Gearless 1/7th contract speed		
15.	Static Drive.	26.4(f)	Min 2 disconnects - both out to start.		

			Test rated load down direction.		
16.	Regenerative Energy.	26.5	Max 120% rated speed - overhauling load.		
17.	Brake Test	8.11(b)	Test at 125% rated load Split pins in spring adjustments.		
18.	Fire Return Operation:	25.7	Where sprinklers fitted in M/R or shaft. All lifts to main floor doors open. "Lift Return" indicator to illuminate. Manual reset by serviceman.		
19.	Earthquake Operation.	25.9	If in motion stop nearest flr doors open. All lifts to respond. Manual reset by serviceman.		
20.	Fire Recall Operation.	25.6	Required where travel exceeds 15m. All car to main floor. Park doors open. "Return to Ground"Indicator illuminated. Key initiated 1.65-1.7m above main flr. Key to be removable. Switch designated "Emerg Fire ecall Sw" Upon return only car call control. Only constant pressure Close Door start. Only constant pressure Open Door. Cancel all calls at first travel stop.		
21.	Other Feature.				

	Equipment to Check	Codes	Results and Comments	Chkd	Fix
1.	Car Gate Switch.	14.1			
2.	Emergency Stop Switch.	24.7	Inhibit car & door operation. visible from landing		
3	Lighting	22.20.1.2	min. 84 lux. or 2 lamps. switch visible from landing.		
4	Power Outlet	24.8			
5	Roof Top control.	25.3	min. 2 button travel. Protected. max speed 0.7m/sec. min. O/H clearance 1.8m.		
6	Safety Gear Switch	29.7	Resets with safety gear only.		
7	Trap Door Switch.	22.15	min 400. max. 625 - max area = 0.25m ² not to foul. fail safe.		
8	Slack Rope Switch.	26.1.9	Drum machines.		
9.	Broken Rope Switch	26.1.7	If safety not operated through rope break		
10.	Top Over Travel limit.	27.1 27.3.4	Direct mechanical break. Metal cams.To remain open comp buffer. Solid buffers- max.225mm from term flr Oil Buffers: - Top 225+25% cwt buf stroke.max 500 Pinned in final position.		
11.	Direction Limit:	27.1 27.2	Direct mechanical operation.Metal cams. Independent to other stopping means. Remain operated until O/T.		
12.	Governor Pull Through.	29.14	min. 100% weight of safety gear.		
13.	Mechanical Clearance. (on compressed cwt buffer)	9.3.1	min. clearance = 0.5 cwt stroke +150		
14.	Man Clearance (on compressed cwt buffer)	9.3.2 9.3.3	min clearance = 0.5 cwt stroke + 760 for O/H sheave, min clearance : = min clear minus 20 for each 10 horiz. & shaft does not protrude more than 175		
15.	Protection of Emerg. Light Source.	22.21	To be secure under all conditions.		
16.	Top of counterweight clearance. (Car on buffer)	9.5	Min. clr = 0.5 car buf stroke + 150mm		
17.	Counterweight.	19.1 19.2	Min.2 tie rods with locknuts & split-pins. Min. 19mm diameter rods.		

1.	Car Clearances.	15.2	Car - Encl. min.40mm Car - Cwt. min.50mm Car - Car. min.100 Car Equip - Car Equip. min.230		
2.	Ropes	16.4 16.3 18.3 table 16.5 17.7 30.5 16.6	min. No. 3 min dia. 9.5mm min pulley 40 x rope dia. 30 for comps. Rope safety factor. <2.25m/s- 10 tension equaliser at one end. governor rope min. 9.5mm Data plate.		
3.	Landing Door Security.	13.3.1 13.3.2 13.3.3 13.3.4 15.1.3.1 15.1.3.2 15.1.1 13.8(a) 13.8(b)	Fire rating. Max.4mm vision panel. Max.1mm indent door gibs and tracks. enclosed cwts where used as door closer. flushing below sill - level dist. +75mm - chamfer 15-30E to vert. - 25mm wider each side of entrance. max. clearances 6.5mm max. 60mm door to sill. 140 btwn doors		
4.	Door Locks	14.4 14.5 13.8(d)	Trulock Emergency Unlocking. Mech. link multi-panel doors.		
5.	Inspection trap & doors.	7.13.1.2	Inspection door - min. 0.6m x 0.6m.		
6.	Shaft Construction.	12 12.6.1 12.6.2	To take all loads plus earthquake. Enclosed 2.5m above accessible floor. Glass min 11.5mm anti-bandit.		
7.	Recesses & Ledges.	15.1.3.2	max 230mm or top 75E bevel to horiz.		
8.	Shaft partitions.	11.4	Where under car < 2.15m above pit flr		
9.	Exclusive use of well.	12.5	only for lift equipment.		
10.	Guide Shoes.	20.15 20.16	max. play 10mm retainer plates engage 54mm. guards on top guides.		
13.	Guide Rails.	20.12 20.11 note	Secure fixings. min 600 above jump. Allowance for building shrinkage.		
14.	Guide Brackets & Fixings.	20.12.3	min. 10mm gussets. Slots 6mm washer. bolt holes max bolt + 1.5mm		
15.	Emergency Speed Limit.	27.4	Where reduces stroke buffers used.		

	Equipment to Check	Codes	Results and Comments	Chkd	Fix
1.	Door Clearances.	13.8(a)	6.5 mm max. gap / 20mm max. overlap.		
2.	Levelling Zone.	14.2	150mm max. w/o levelling. 300mm with levelling. 500mm with auto doors and levelling. max. sill clearance 35mm.		
3.	Close force limits.	23.5	max kinetic energy 9.5j to stop from rest 130N		
4.	Entry Passenger Protection.	23.6	delayed close 3.4j. with audible warning		
5.	Lighting.	22.20.2	50 lux min at sill. Incandescent -2 lamps. Lift / house supply same phase. Key operated. 100mm clear of trapdoor.		
6.	Emergency lighting	22.20.2.7	To operate within 15sec of power failure. Connect to lift supply. 2hrs continuous. min 2 lamps. 10 lux floor, at phone & alarm.		
7.	Disabled Access.	71.1	Levelling " 20mm Car size 1.4m x 1.4m. Min 0.9m entry.		
8.	Disabled controls.	71.4	Within 0.9m - 1.5m. Min dia 20mm. 15mm tactile designations. Star on main floor.		
9.	Disabled indication.	71.5	Arrival gong 2 -down / 1 up. or 20mm tactile on door. Position indication.		
10.	Ventilation.	22.25	5% car area over top / btm. <300 >1800 max. 10mm dia. rod.		
11.	Rated Load.	21.1	load = 35.05 x fl m5 + 325.66 x area.		
12.	Notice	21.3	Min. 6mm high lettering - load /persons.		
13.	Alarm	28.3.2	150mm dia/ electronic label "Lift Alarm" If not 24hr - external alarm required.		
14.	Telephone.	28.3.3	24hr Vandal resistant single button.		
15.	Handrails.	71.6	All sides except door.		

	Equipment to Check	Codes	Results and Comments	Chkd	Fix
1.	Access.	7.4.3 7.14 7.5 7.4.1 7.3	Danger notice. min. 200lux at f/l. Twin fluorescents. Safe access to comply with D1 & F4. Key lockable door. No lock inside. Only lift equipment in machine room.		
2.	Construction.	7.15 7.8 7.8 7.17 7.10	Weather protection. Non-slip floor. Designed to withstand loads. >5kpa. Spot loading 6.7kN on any 300mm5 Suitable ventilation. 5 - 40EC. Coamings on floor penetrations.		
3.	Clearances.	7.7.4(a) 7.7.2 7.7.3 7.7.4 7.6 7.6 7.11 - D1	Controllers.- Min 1.0m in front 380 side. Machinery. - Min 0.6m to wall. 2 sides. Clear access ways - min. 0.45m to. - min 0.38m around. Equipment clearance: - Floor selector: - 1.0m front 280 sides - MG's - 450 comm + 1 side. - OT switch - 180 front - J/Box - 450 front - Pawl Gov. - 380 access 180other - Flyball - 480 access 380 grip Clear height 2.0m. Clear above sheave - 1.0m Steps where floor differs 0.5m.		
4.	Main Supply.	24.21 24.18	Accessible from the entrance to M/R. Labelled accordingly.		
5.	Light & Power.	7.14-7.16	200 lux at floor level. At least one plug. Adj to main sw. own protection. Flourescents - min. twin tubes.		
6.	Hydraulic tank fluid levels.	37.0	Shall be easy to check. Labelled.min/max		
7.	Earthquake security of equipment.	6.4	MG's. floor controllers, machines, beams.		
8.	Circuit Diagrams.	24.25	To be encapsulated.		
9.	Log Book	1.5	To record all maintenance, repairs, tests.		
10.	Trunking & Conduit	24.22(a)	Not in access ways. In floor <3mm flush.		
11.	Hatches.	7.9	Clear access to top floor Trap doors - min.5kPa. Flush with floor. Guard rails if falling possible.		