

MAINTENANCE EVALUATION CHECKLIST ESCALATORS AND MOVING WALKS

BUILDING: _____ **EQUIPMENT #:** _____

Manufacturer: _____ **Model:** _____

Evaluation Performed By: _____

INTRODUCTION:

This checklist will enable the user to make an objective appraisal of the condition of the equipment. Given the variety and complexity of the equipment, many of the questions may not apply.

When completing this form, rate each of the items using one of the three columns provided. Enter N/A in those columns that do not apply to the installation being evaluated.

NOTE: The following items correlate to the *NEII*® Maintenance Guidelines. The number in the "Paragraph" column corresponds with the "Paragraph" number in the Maintenance Guidelines. Cross references in the maintenance guidelines are reflected in the details column.

	Details	Paragraph	Rating		
			Above Average	Average	Below Average
LANDINGS					
1	Unusual noises or vibrations	13.4.1			
2	Step/pallet treads should not be broken	13.6.2			
3	Comb teeth condition, mesh with steps/pallet treads	13.6.3			
4	Step/pallet wear	13.6.4			
5	Landing plate, non-slip surface	13.6.5			
6	Balustrade and molding condition	13.6.7			
7	Handrail entry guards, condition	13.6.11			
8	Landings and steps adequately lighted	13.6.13			
9	Escalator/moving walk landing to building floor interface	13.6.14			
10	Wedge guards	13.7.1.1			
11	Anti-slide devices, high decks	13.7.1.2			
12	Deck barricades for low deck designs	13.7.1.3			
13	Caution signs at both landings	13.7.1.4			
14	Operating and safety devices to suit applicable codes. Where lacking, suitable recommendations made to owner	13.7.2.1			
15	Stop buttons operating correctly, identified, located and guarded to suit local codes	13.7.2.2			
16	Starting switch operation, located to permit operator to observe steps during starting, automatic starting prohibited	13.7.2.3			
17	All safety devices tested for operation	13.7.2.4			
RIDING					
18	Demarcation lighting	13.6.6			
19	Balustrade and molding condition	13.6.7			
20	Skirt panel condition	13.6.8			
21	Skirt panel, low friction material or friction reducing treatment	13.6.9			
22	Step/skirt performance index	13.6.10			
23	Handrail speed matches steps/pallet, handrail condition	13.6.11			
24	Step to skirt clearance	13.6.13			
25	Landings and steps adequately lighted	13.6.14			
INSIDE TRUSS					
26	Grounds and bonds in place	3.2			
27	Pits should be dry and clean	13.2.1			
28	Truss, tracks, steps, chains, handrails, handrail drives should be clean	13.2.2			

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			Above Average	Average	Below Average
29	Properly lubricated using specified lubricants	13.3.1			
30	Condition of lubricants	13.3.2			
31	Chain lubrication	13.3.3			
32	Machine and emergency brake	13.3.4			
33	Gear reduction units	13.3.5			
34	External gears, handrail drives and idler sheaves	13.3.6			
35	Step/pallet and chain wheels	13.3.7			
36	Chain slack should be kept to minimum	13.5.6.1			
37	Sprockets should be examined for worn teeth and bearings	13.5.6.2			
38	Belts should be examined for wear, cracks, and tension	13.5.6.3			
39	Track system, wear, uneven joints	13.5.7.1			
40	Examine step/pallet chains for wear, stretch	13.5.8.1			
41	Step/pallet chain wheel bearings and tires	13.5.8.2			
42	Condition of step/pallet wheels	13.6.1			
43	Condition of steps or pallets	13.6.2			
44	Applicable codes operating and safety devices	13.7.2.1			
45	Safety devices and switches operate properly	13.7.2.4			
MACHINE SPACE					
46	Grounds and bonds in place	3.2			
47	Pits dry and free from debris and excess lubricant	13.2.1			
48	Drive machine space	13.2.3			
49	Properly lubricated using specified lubricants	13.3.1			
50	Condition of lubricants	13.3.2			
51	Chain lubrication	13.3.3			
52	Machine and emergency brake	13.3.4			
53	Gear reduction units	13.3.5			
54	External gears, handrail drives and idler sheaves	13.3.6			
55	Step/pallet and chain wheels	13.3.7			
56	Reduction gears	13.5.1			
57	Condition and wear of reduction gears	13.5.1.1			
58	Reduction gear bearings, quiet and cool	13.5.1.2			
59	Reduction gear minimum leakage of shaft seals	13.5.1.3			
60	Reduction gear controlled leakage of gland pack	13.5.1.4			
61	Machine brake pulley and coupling shaft fits secure	13.5.2.1			
62	Machine brake flexible couplings, condition	13.5.2.2			
63	Pulley surface, smooth, minimum scoring	13.5.2.3			
64	Machine and emergency brake switches, properly adjusted	13.5.3.1			
65	Machine and emergency brake lining wear or condition	13.5.3.2			
66	Machine and emergency brake consistent lifting	13.5.3.3			
67	Brake torque properly adjusted	13.5.3.4			
68	Drive motor bearings run quiet & cool (refer to 11.5.1)	13.5.4			
69	Drive motor field coils tight (refer to 11.5.2)	13.5.4			
70	Drive motor electrical connections tight, no discoloration (refer to 11.5.3)	13.5.4			
71	Drive motor armature & rotor clearance (refer to 11.5.4)	13.5.4			
72	Drive motor commutator condition (refer to 11.5.5)	13.5.4			
73	Drive motor brushes move freely, condition (refer to 11.5.6)	13.5.4			
74	Drive motor minimum sparking (refer to 11.5.7)	13.5.4			
75	Drive motor insulation resistance check (refer to 11.5.8)	13.5.4			

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			Above Average	Average	Below Average
76	Insulation resistance check	13.5.4			
77	Sound isolation, pads in good condition (refer to 11.6.1)	13.5.5			
78	Kick angles and tie downs (refer to 11.6.2)	13.5.5			
79	Chain adjusted, examine for wear and stretch	13.5.6.1			
80	Sprocket wear, alignment, bearings	13.5.6.2			
81	Belts wear, cracks, tension, alignment	13.5.6.3			
82	Track system, wear, uneven joints, condition	13.5.7.1			
83	Examine step/pallet chains for wear, stretch	13.5.8.1			
84	Step/pallet chain wheel bearings and tires	13.5.8.2			
85	Upper and lower drives or tension carriages	13.5.9			
86	Upper & lower drives or tension carriage shaft fits, bearings, tooth wear	13.5.9.1			
87	Upper & lower drives free movement, adequate tension	13.5.9.2			
88	Applicable codes operating and safety devices	13.7.2.1			
89	Safety devices and switches operate properly	13.7.2.4			
90	Static motion control, safety requirement (refer to 10.2.2)	13.8.1			
91	Fuses proper rating and type (refer to 10.2.3)	13.8.1			
92	Switch gear (refer to 10.3)	13.8.1			
93	Worn or maladjusted contacts replaced or corrected (refer to 10.3.1)	13.8.1			
94	Shunts in good condition (refer to 10.3.2)	13.8.1			
95	No contacts blocked, residual guards and shading coils okay, pivots lubricated, kickoff springs in place, encapsulated relay condition (refer to 10.3.3)	13.8.1			
96	Overload relays tagged with test data. Dashpots (if used) free to operate, oil level satisfactory (refer to 10.3.4)	13.8.1			
97	Switches operate smoothly, quietly (refer to 10.3.5)	13.8.1			
98	Mechanical condition (refer to 10.5)	13.8.1			
99	Connections tight, no heating (refer to 10.5.1)	13.8.1			
100	Cleanliness (refer to 10.5.2)	13.8.1			
101	Resistors, grids, wiring and band condition (refer to 10.5.3)	13.8.1			
102	Resistors, capacitors, good condition, properly mounted (refer to 10.5.4)	13.8.1			
103	Wiring neat, bundled, terminals labeled (refer to 10.5.5)	13.8.1			
104	Wiring diagrams, current, condition (refer to 10.7.1)	13.8.1			
MISCELLANEOUS					
105	Scope (a) Written maintenance control plan (b) Trained personnel (c) Plan execution	1.0			
106	Managed maintenance system in place and being used	3.4			
107	Equipment records	3.5			
	Define contract responsibilities	5.0			
108	Code tests	5.1			
109	Test and callback records	5.2			
110	Environmental regulations compliance	5.3			
	Escalator and moving walks	13.0			
111	Storage cabinets and areas	13.2.4			