



Elevator Safety Program  
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# Hydraulic Elevator Checklist

## Passenger & Freight Elevators

### Multi-Car Acceptance Inspection Checklist

#### References

- ASME A17.1, 2004 – Effective 4/1/2005
- A17.2, 2001 – Effective 1/1/2003
- Oregon Structural Specialty Code 2003 – Effective 10/1/2004
- Oregon Electrical Specialty Code 2005 – Effective 4/1/2005
- NFPA 72, 2002; Fire Alarm Systems
- NFPA 13, 2002; Sprinkler Systems

***Note: Potential code violations are not necessarily restricted to this checklist.***

The comments used in this checklist give direction only and are not intended to circumvent actual code language. Please refer to the appropriate standard as necessary to clarify any code issues that may arise during this inspection.

The codes referenced in this checklist are applicable to the elevator installation as of the effective date of the elevator safety code. If an electrical or structural permit was issued prior to 4/1/2005, the previous addition of the code may be used to resolve code conflicts providing a copy of the electrical and/or structure permit is obtained for verification.

While the Elevator Safety Program does not directly regulate the building code, it is permissible to question code issues and request clarification or validation from the local building department. Do not require any corrections unless supported by the local building department in such cases.

Site Name: \_\_\_\_\_ Code Date: \_\_\_\_/\_\_\_\_/\_\_\_\_

Elevator ID: Car #1: - Car #2: - Car #3: -

1 <sup>st</sup> Inspection	2 <sup>nd</sup> Inspection	3 <sup>rd</sup> Inspection	4 <sup>th</sup> Inspection
____/____/____	____/____/____	____/____/____	____/____/____
Arr: ____ : ____	Arr: ____ : ____	Arr: ____ : ____	Arr: ____ : ____

**HYDRAULIC PASSENGER & FREIGHT ELEVATORS**  
**ASME A17.1 2004**

Safety Test Data Sheet 1 – Direct & Roped Hydraulic Elevators (indicate metric or imperial measurements-Metric <input type="checkbox"/> Imperial <input type="checkbox"/> )																			
Rated Speed: M/s (fpm)		Governor Data N/A <input type="checkbox"/> Trip speed: Min. _____ Max. _____ m/s (fpm) Slide: Min. _____ Max. _____ mm (in.)				Type of Safeties N/A <input type="checkbox"/> <b>A B C</b> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>				Max./Min. Runby mm (in.)		Oil Buffer Return N/A <input type="checkbox"/>		Net Platform Area m <sup>2</sup> (ft <sup>2</sup> )		Rated Speed Test m/s or (fpm)			
Car Designation & Rated Speed		Switch If >.75 m/s (150 fpm)		Trip Speed m/s fpm		Pull Thru N (lbs.)		Slide mm (in.)		Pull Out mm (in.)		Cwt.	Car	Max. 90 seconds		Passenger <input type="checkbox"/>	Freight <input type="checkbox"/>	Empty Car	Full Load
		Car	Cwt	Car	Cwt	Car	Cwt	Car	Cwt	Car	Cwt	900 mm (36")	610 mm (24")	Car	Cwt				
Car 1																		Up _____	Up _____
																		Dn _____	Dn _____
Car 2																		Up _____	Up _____
																		Dn _____	Dn _____
Car 3																		Up _____	Up _____
																		Dn _____	Dn _____
Car Designation		Door Measurements				Illumination Minimum lx (ftc)					Audible Signals (dB)		Running Clearances Take nominal measures throughout H/W						
		Door Press. 135 N (30 lbs)	Door Closing Speed m/s (ft/s)	Door Timing (ADA req.)		Hall 100 lx - 10 ftc	E- Light 2 lx 0.2 ftc	Car 50 lx - 5 ftc	Pit 100 lx - 10 ftc	M/R 200 lx - 19 ftc	Floor Passing Tone Min. 20 db	Emergency Alarm 80-90	Sill Clearance 13/19-38 mm (½" – 1 ½") or (¾" – 1 ½")	Car to H/W mm (in.)	Car to Cwt. Minimum 50 mm (2") N/A <input type="checkbox"/>				
Car 1		Front																	
		Rear																	
Car 2		Front																	
		Rear																	
Car 3		Front																	
		Rear																	

**HYDRAULIC PASSENGER & FREIGHT ELEVATORS**  
**ASME A17.1 2004**

Safety Test Data Sheet 2 – Direct & Roped Hydraulic Elevators ( <i>indicate metric or imperial measurements-Metric</i> <input type="checkbox"/> <i>Imperial</i> <input type="checkbox"/> )															
Car Designation	Refuge Space		Operating Pressures kpa (PSI) WP ÷ PR = %				Notes/Comments:								
	Top	Bottom	Empty Car	Working Pressure (WP)	Pressure Relief (PR)	% Max. 150% of WP									
Car 1_____	Min. Ht. 1100 mm (43 in.)	600 mm x 1220 mm x 600 mm 450 mm x 900 mm x 1100 mm													
		_____ X _____ X _____													
Car 2_____															
		_____ X _____ X _____													
Car 3_____															
		_____ X _____ X _____													
Landing Illumination Levels - Indicate: <input type="checkbox"/> Lx or <input type="checkbox"/> ftc (1 lx = .929 ftc)															
	1 <sup>st</sup>	2 <sup>nd</sup>	3 <sup>rd</sup>	4 <sup>th</sup>	5 <sup>th</sup>	6 <sup>th</sup>	7 <sup>th</sup>	8 <sup>th</sup>	9 <sup>th</sup>	10 <sup>th</sup>	11 <sup>th</sup>	12 <sup>th</sup>	13 <sup>th</sup>	14 <sup>th</sup>	15 <sup>th</sup>
1															
2															
3															
Comments															

**PASSENGER & FREIGHT HYDRAULIC ELEVATOR**  
**ASME A17.1 2004**

AREA	REQ.	COMMENTS	Cars 1-3														
<b>INSIDE CAR</b>	<b>A17.1 (A17.2)</b>	<b>A17.2 item numbers appear below A17.1 req. numbers only if comments are found in A17.2 for acceptance inspections.</b>	<b>Check the box for the corresponding car</b>														
<b>DOOR OPERATION</b>																	
Door Reopening Device	2.13.5.1	Doors must stop and reopen	<table border="0" style="width: 100%;"> <tr> <td style="width: 50%; text-align: right;">Front</td> <td style="width: 50%; text-align: center;"><input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/></td> </tr> <tr> <td style="width: 50%; text-align: right;">Rear</td> <td style="width: 50%; text-align: center;"><input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/></td> </tr> </table>	Front	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	Rear	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>										
Front	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>																
Rear	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>																
Door Closing Force	2.13.4.2.3	Cannot exceed 135 N (30 lbs.) (see 2.13.3.1).	Enter readings on data sheet														
Door Kinetic Energy (see application pg. 2)	2.13.4.2.1	1) Not to exceed 10 J (7.37 ft-lbf) on average closing speed. 2) Maximum: 23 J (17 ft-lbf) at any point in the code zone distance.	Enter readings on data sheet														
Door Closing Speeds (Typically freight elevators)	2.13.3.4.5	1) Bi-parting doors; maximum 0.3 m/s (1 ft/s) 2) Vertical doors; maximum 0.6 m/s (2 ft/s)	<table border="0" style="width: 100%;"> <tr> <td style="width: 50%;"></td> <td style="width: 50%; text-align: center;">N/A <input type="checkbox"/></td> </tr> <tr> <td style="width: 50%;"></td> <td style="width: 50%; text-align: center;"><input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/></td> </tr> <tr> <td style="width: 50%;"></td> <td style="width: 50%; text-align: center;"><input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/></td> </tr> </table>		N/A <input type="checkbox"/>		<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>		<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>								
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Unlocking of Doors	2.13.2	1) Opening not to exceed 450 mm (18") from floor. 2) Must open within 75 mm (3") from floor. 3) Shall only occur in the leveling zone	<table border="0" style="width: 100%;"> <tr> <td style="width: 50%;"></td> <td style="width: 50%; text-align: center;"><input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/></td> </tr> <tr> <td style="width: 50%;"></td> <td style="width: 50%; text-align: center;"><input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/></td> </tr> <tr> <td style="width: 50%;"></td> <td style="width: 50%; text-align: center;"><input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/></td> </tr> </table>		<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>		<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>		<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>								
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Power Opening of Doors																	
Restricted Opening of Doors-Anti-egress device	2.12.5	1) Anti-egress lock (zone lock) 2) Door opening not to exceed 100 mm (4")	<table border="0" style="width: 100%;"> <tr> <td style="width: 50%;"></td> <td style="width: 50%; text-align: center;">N/A <input type="checkbox"/></td> </tr> <tr> <td style="width: 50%;"></td> <td style="width: 50%; text-align: center;"><input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/></td> </tr> </table>		N/A <input type="checkbox"/>		<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>										
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Vision Panels	2.14.2.5	Vision panels must comply with the following: 1) Max. of 0.1 m <sup>2</sup> (144-in <sup>2</sup> ). 2) Not more than 150mm (6") on one side. 3) Marked wire glass or laminated glass only.	<table border="0" style="width: 100%;"> <tr> <td style="width: 50%;"></td> <td style="width: 50%; text-align: center;">N/A <input type="checkbox"/></td> </tr> <tr> <td style="width: 50%;"></td> <td style="width: 50%; text-align: center;"><input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/></td> </tr> <tr> <td style="width: 50%;"></td> <td style="width: 50%; text-align: center;"><input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/></td> </tr> <tr> <td style="width: 50%;"></td> <td style="width: 50%; text-align: center;"><input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/></td> </tr> </table>		N/A <input type="checkbox"/>		<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>		<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>		<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>						
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Glass Door Panels	2.14.5.8 (1.11.3)	Glass panels must be: 1) Minimum 60% of visible door area as viewed facing the hoistway door. 2) Laminated glass only. 3) Min. 14.29 mm (9/16") thick.	<table border="0" style="width: 100%;"> <tr> <td style="width: 50%;"></td> <td style="width: 50%; text-align: center;">N/A <input type="checkbox"/></td> </tr> <tr> <td style="width: 50%;"></td> <td style="width: 50%; text-align: center;"><input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/></td> </tr> <tr> <td style="width: 50%;"></td> <td style="width: 50%; text-align: center;"><input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/></td> </tr> <tr> <td style="width: 50%;"></td> <td style="width: 50%; text-align: center;"><input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/></td> </tr> </table>		N/A <input type="checkbox"/>		<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>		<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>		<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>						
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Car Door or Gate	2.14.4.5	1) Distance from car door to hoistway door: a) Swing H/W door & Car Gate; 100 mm (4") b) Swing H/W door & Car Door; 140 mm (5½") c) Sliding H/W door & Car Door/gate; 140 mm (5½")	<table border="0" style="width: 100%;"> <tr> <td style="width: 50%;"></td> <td style="width: 50%; text-align: center;"><input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/></td> </tr> <tr> <td style="width: 50%;"></td> <td style="width: 50%; text-align: center;"><input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/></td> </tr> <tr> <td style="width: 50%;"></td> <td style="width: 50%; text-align: center;"><input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/></td> </tr> </table>		<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>		<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>		<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>								
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Closed Position of Car Doors	2.14.4.11	Maximum between door and jamb; 50 mm (2")	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>														
Freight Elevator Door Types	2.14.6.1	Door must be of the following configuration: 1) Class A Loading; Vertical or horizontal 2) Class B or C Loading; Vertical only	<table border="0" style="width: 100%;"> <tr> <td style="width: 50%;"></td> <td style="width: 50%; text-align: center;">N/A <input type="checkbox"/></td> </tr> <tr> <td style="width: 50%;"></td> <td style="width: 50%; text-align: center;"><input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/></td> </tr> <tr> <td style="width: 50%;"></td> <td style="width: 50%; text-align: center;"><input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/></td> </tr> </table>		N/A <input type="checkbox"/>		<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>		<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>								
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Gate Switch	2.26.2.15	Not accessible from inside car	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>														
<b>OPERATION &amp; FIXTURES</b>																	
Emergency Stop Switch & Emergency Stop Switch Audible Signal.  E-stop switch not allowed in passenger elevators.	2.27.1.2	1) When an emergency stop switch (2.26.2.5) is provided, an audible signaling device shall be provided. The audible signaling device shall a) have a rated sound pressure rating of not less than 80 dBA nor greater than 90 dBA at 3 m (10 ft); b) respond without delay after the switch has been activated; c) be located inside the building and audible inside the car and outside the hoistway; and d) for elevators with a travel greater than 30 m (100 ft), be duplicated as follows: i) one device shall be mounted on the car; and ii) a second device shall be placed at the designated level.	<table border="0" style="width: 100%;"> <tr> <td style="width: 50%;"></td> <td style="width: 50%; text-align: center;">N/A <input type="checkbox"/></td> </tr> <tr> <td style="width: 50%;"></td> <td style="width: 50%; text-align: center;"><input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/></td> </tr> <tr> <td style="width: 50%;"></td> <td style="width: 50%; text-align: center;"><input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/></td> </tr> <tr> <td style="width: 50%;"></td> <td style="width: 50%; text-align: center;"><input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/></td> </tr> <tr> <td style="width: 50%;"></td> <td style="width: 50%; text-align: center;">.....N/A <input type="checkbox"/></td> </tr> <tr> <td style="width: 50%;"></td> <td style="width: 50%; text-align: center;"><input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/></td> </tr> <tr> <td style="width: 50%;"></td> <td style="width: 50%; text-align: center;"><input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/></td> </tr> </table>		N/A <input type="checkbox"/>		<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>		<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>		<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>		.....N/A <input type="checkbox"/>		<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>		<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
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In Car Stop Switch (passenger elevators)	2.26.2.21	Passenger Elevator 1) Keyed Switch 2) Behind a locked panel	<table border="0" style="width: 100%;"> <tr> <td style="width: 50%;"></td> <td style="width: 50%; text-align: center;">N/A <input type="checkbox"/></td> </tr> <tr> <td style="width: 50%;"></td> <td style="width: 50%; text-align: center;"><input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/></td> </tr> <tr> <td style="width: 50%;"></td> <td style="width: 50%; text-align: center;"><input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/></td> </tr> </table>		N/A <input type="checkbox"/>		<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>		<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>								
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**PASSENGER & FREIGHT HYDRAULIC ELEVATOR**  
**ASME A17.1 2004**

<b>Car Enclosure</b>	<b>A17.1 (A17.2)</b>	<b>COMMENTS</b>	<b>CARS 1-3</b>																									
Operating Control Devices ADA Requirements <i>*Refer to ICC/ANSI A117.1-2003 see attached ADAAG information and figures. See A17.1, Table 2.26.12.1</i>	2.26.1.1 2.26.12 407.4.6* (1.3 & 1.5)	Car Operating Station; 1) Push button operation 2) Braille (all COP buttons and controls)  a) ★ Located at main floor car call. 3) Alarm button: 890 mm (35") from floor 4) Highest call button maximum height: 1370 mm (54") w/parallel approach	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>																									
Leveling Accuracy	2.26.11(a)	1) Leveling accuracy required to be $\pm 1/2"$ ( $\pm 13$ mm)	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>																									
Minimum Door Widths <b>Note: A 42" opening for C/O doors is not yet mandatory. If 36" opening is provided it complies with the OSSC.</b>	407.4.1*  N/A <input type="checkbox"/> N/A <input type="checkbox"/> N/A <input type="checkbox"/> N/A <input type="checkbox"/>	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 15%;">Location</th> <th style="width: 15%;">Clear Opening</th> <th style="width: 15%;">Side to Side</th> <th style="width: 15%;">Back to Return</th> <th style="width: 15%;">Back to Door</th> </tr> </thead> <tbody> <tr> <td>C/O</td> <td>1065 mm (42-in.)</td> <td>2030 mm (80-in.)</td> <td>1295 mm (51-in.)</td> <td>1370 mm (54-in.)</td> </tr> <tr> <td>S/S</td> <td>915 mm (36-in.)</td> <td>1725 mm (68-in.)</td> <td>1295 mm (51-in.)</td> <td>1370 mm (54-in.)</td> </tr> <tr> <td>Any</td> <td>915 mm (36-in.)</td> <td>1370 mm (54-in.)</td> <td>2030 mm (80-in.)</td> <td>2030 mm (80-in.)</td> </tr> <tr> <td>Any</td> <td>915 mm (36-in.)</td> <td>1525 mm (60-in.)</td> <td>1525 mm (60-in.)</td> <td>1525 mm (60-in.)</td> </tr> </tbody> </table>	Location	Clear Opening	Side to Side	Back to Return	Back to Door	C/O	1065 mm (42-in.)	2030 mm (80-in.)	1295 mm (51-in.)	1370 mm (54-in.)	S/S	915 mm (36-in.)	1725 mm (68-in.)	1295 mm (51-in.)	1370 mm (54-in.)	Any	915 mm (36-in.)	1370 mm (54-in.)	2030 mm (80-in.)	2030 mm (80-in.)	Any	915 mm (36-in.)	1525 mm (60-in.)	1525 mm (60-in.)	1525 mm (60-in.)	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
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Car Position Indicators; Visual and Audible	407.4.9.1*  407.4.9.2*	1) CPI: a) minimum 13 mm (1/2") in height b) above door or COP c) direction indicator 2) Audible Indicators..... a) Verbal annunciator indicating floor b) Minimum 10 db above ambient levels c) 300 Hz to 3000 Hz d) Cars 1 m/s (200 fpm) or less may have:..... i) minimum floor passing tone @1500 Hz	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> .....N/A <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> .....N/A <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>																									
Hall and Car Lanterns Visual & Audible Signals  For Destination Oriented systems, see A117.1.	407.2.2.1*  407.2.2.2*  407.2.2.3*	1) Hall:..... a) provided at each landing b) indicate direction 2) Car:..... a) Must be visible from the hall call buttons 3) Both:..... a) Centered 1830 mm (72-in.) from floor b) Minimum 64 mm (2 1/2 -in.) along vertical C/L 4) Audible signals shall:..... a) Sound once for up; twice for down b) Audible tones @ 1500 Hz c) Verbal annunciators @ 300 to 3000 Hz d) Minimum of 10 dBA above ambient e) Maximum of 80 dBA	.....N/A <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> .....N/A <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>																									
Door Delay (car calls)	407.3.5*	1) Elevator doors shall remain fully open in response to a car call for 3 seconds minimum.	Enter Measurements on Data Sheet																									
Handrails	505*	1) Handrails are no longer required. Where provided they shall comply with Section 505 of ANSI A117.1.	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>																									
GFI 15 & 20 Amp Receptacles	NEC 620-85	1) All in-car receptacles <b>may</b> be GFCI protected or be of the GFCI type	N/A <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>																									
Sill Running Clearance	2.5.1.4	1) Clearance 13-38 mm ( 1/2 - 1 1/2 in.) 2) Corner Poster, 19-38 mm ( 3/4 - 1 1/2 in.)	Enter Measurements on Data Sheet																									

**PASSENGER & FREIGHT HYDRAULIC ELEVATOR**  
**ASME A17.1 2004**

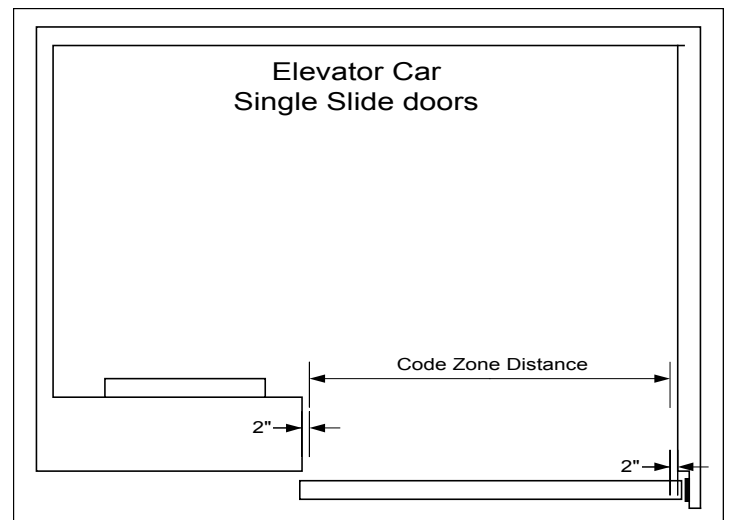
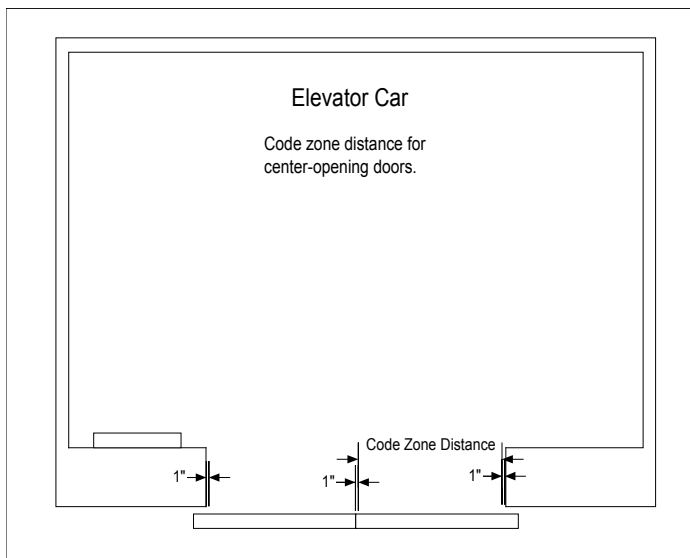
<b>Car Enclosure</b>	<b>A17.1 (A17.2)</b>	<b>COMMENTS</b>	<b>CARS 1-3</b>
Sills and Car Floor <input type="checkbox"/> Existing	(1.4)	1) Check that landing sills are substantially flush with the floor surface of the landings and the sill does not present a tripping hazard. a) Changes in level up to 1/4 in. (6 mm) may be vertical and without edge treatment. b) Changes in level between 1/4 in. (6 mm) and 1/2 in. (13 mm) must be beveled; and c) Changes in level above 1/2 in. (13 mm) must be ramped.	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
Car Numbering (Multiple Cars)	2.29.1	1) Minimum 13.0 mm (1/2") high on COP	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
Car Lighting & Accessories <i>Enter ftc measurements on the data sheet .</i>	3.14 (1.5.3)  620.22>  620.54>	1) Min. 50 lx (5 ftc) @ sill (passenger) 2) Min. 25 lx (2.5 ftc) @ sill (freight)  3) Minimum of 2 lamps must be provided. 4) E-light min. 2 lx (0.2 ftc) @ COP (not required on freight elevators) ..... 5) Car Lighting Circuit a) Separate branch circuit must be provided b) Overcurrent protection must be located in M/R c) Disconnecting means must be located in M/R 6) Car AC/heating Units (when provided)..... a) Separate branch circuit must be provided b) Overcurrent protection must be located in M/R c) Disconnecting means must be located in M/R 7) Light switch is not required in car; when provided:..... a) Located adjacent to or in COP for non-automatic cars. b) Key operated or behind locked panel in automatic cars. 8) Automatic shut-down of lights permitted after 5 min if:..... a) Car is at floor level; b) Doors are closed; c) No demand to run; and d) Car is automatic operation	Enter measurements on data sheet <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> .....N/A <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> .....N/A <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> .....N/A <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> .....N/A <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
Car Enclosure Materials (Passenger Elevator)	2.14.2 (1.12.3) 2.14.3	1) Metal, laminated glass or meet ASTM E84, UL 723 or NFPA 255; (carpet) ASTM E 648 Laminated glass must comply with: 2) ANSI Z97.1 or 16 CFR 1201, Sect. 1201.4	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> .....N/A <input type="checkbox"/>
Ventilation <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> Fan provided but not required.	2.14.2.3	1) Natural Ventilation Openings a) Not more than 300 mm (1') from platform b) Must reject 25 mm (1" ball); 50 mm (2" on freight) c) Above 1825 mm (6'), must reject 50 mm (2") ball d) Total area 3½% of inside floor area e) No "straight-through" vent openings 2) Forced Ventilation..... a) Req. on observation cars exposed to direct sunlight b) 1 hr. standby power required c) Located on car top and secured	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> .....N/A <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
Platform Net Inside Area (Passenger Elevators only) Not applicable to freight elevators	2.16.1.1 (1.16.3) ANSI A117.1	1) Ensure platform area does not exceed maximum allowed for rated load: 2) Minimum size car with side opening doors cannot be less than 1727 x 1295 mm (68" w x 51" d) ( <b>ADA req.</b> ; equates to about a 2000-lb. cap. car) 3) Minimum size car with center opening doors can not be less than 2032 x 1295 mm (80" w x 51" d) ( <b>ADA req.</b> ; equates to about a 2500-lb. cap. car)	N/A <input type="checkbox"/>  Enter Measurements on Data Sheet

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<b>Car Enclosure</b>	<b>A17.1 (A17.2)</b>	<b>COMMENTS</b>	<b>CARS 1-3</b>
In-Car Inspection Operation (where provided)	3.26.2 (2.26.1.4)	In-car Inspection operation: 1) Shall operate the car at no more than 0.75 m/s (150 fpm.) 2) Shall be of the continuous pressure type. 3) Transfer of control located in the car marked clearly "on-off" 4) Transfer switch keyed or behind locked panel 5) May not operate when car top inspection station is activated	N/A <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
Emergency Exit	2.14.1.5.1 8.4.4.1.1  2.14.1.5.1(d)	1) Min. 0.26 m <sup>2</sup> (400 <sup>2</sup> mm) & min. 400 mm (16") on any side: 2) Be equipped with a five-pin keyed lock unlike any other key in building. May be keyed alike with the hoistway access key when provided (refer to 2.12.7) 3) Clear access must be maintained for opening in a dropped ceiling to escape hatch.	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>  <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
Intercom	2.27.1.1.4 (Oregon amendment)	1) An intercom or telephone capable of being activated from a point outside the elevator shall be provided and be located at a readily accessible point outside the hoistway that is available to emergency personnel. One master control station may be used to connect all elevators under common group control. 2) The device shall be within sight of the elevators served. <i>(see 2.27.1.1.4(a)-(d) for additional requirements).</i>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>  <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
<p>Oregon Amendment to <b>2.27.1.1.4</b>:  <i>An intercom or telephone capable of being activated from a point outside the elevator shall be provided and be located at a readily accessible point outside the hoistway that is available to emergency personnel. One master control station may be used to connect all elevators under common group control. The device shall be within sight of the elevators served.</i>  <i>(a) The means shall enable emergency personnel within the building to establish two-way voice communications to each car individually. Two-way voice communication shall be established without any intentional delay and shall not require intervention by a person within the car. The means shall override communications to outside of the building.</i>  <i>(b) Two-way voice communications, once established, shall be disconnected only when emergency personnel outside the car terminates the call.</i>  <i>(c) Once the two-way voice communication has been established, the visual indication [see 2.27.1.1.3(c)] within the car shall illuminate. The visual indication shall be extinguished when the two-way communication is terminated.</i>  <i>(d) Operating instructions shall be incorporated with or adjacent to the two-way voice communication outside the car. Instructions shall conform to 2.27.7.3.</i></p> <p><b>2.27.1.1.3 (j)</b> Telephone lines, when provided, are not required to be dedicated. However, the failure or use of any single device, including other elevator communication devices, connected to the same telephone line shall not render the elevator telephone inoperative.</p>			
Capacity Plate	2.16.3.1	1) Located in conspicuously in car.	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
Identification Numbering (w/multiple cars in bldg.)	2.29.1	1) Minimum 13 mm (1/2") high on COP.	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
Phase II Operation Sign	2.27.7	1) Next to Phase II switch.; 2) Minimum 3.175 mm (1/8") high letters.	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
Material and Marking of Plates.	2.16.3.3	1) Plates shall be of such material and construction that the letters and figures stamped, etched, cast, or otherwise applied to the faces shall remain permanently and readily legible. 2) The height of the letters and figures shall be not less than a) 6 mm (0.25 in.) for passenger elevator capacity plates b) 25 mm (1 in.) for freight elevator capacity plates c) 3 mm (0.125 in.) for data plates	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>  <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
Car Ride	(1.19.3)	1) Observe ride, slow down and stop	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>

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Car Enclosure	A17.1 (A17.2)	COMMENTS	CARS 1-3
Data Plates <input type="checkbox"/> Existing	2.16.3.2	1) The data plate shall be located on the car crosshead, or inside the car for underslung elevators having no crosshead.	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
	2.16.3.2.1	2) Information Required on Plates..... a) Capacity plates shall indicate the rated load of the elevator in kilograms or pounds or both (see Nonmandatory Appendix D), and, in addition, this plate or a separate plate shall indicate b) the capacity lifting one-piece loads where the elevator conforms to 2.16.7 c) for freight elevators designed for Class C2 loading, the maximum load the elevator is designed to support while being loaded or unloaded [see 2.16.2.2.4(c)]	..... <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>  <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>  <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
	2.16.3.2.2	3) Data plates shall indicate..... a) the weight of the complete car, including the car safety and all auxiliary equipment attached to the car b) the rated load and speed c) the wire rope data required by 2.20.2.1 d) the name or trademark of the manufacturer and year manufactured e) rail lubrication instructions (see 2.17.16)	..... <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>  <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>  <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
Access Panels	2.14.2.6	1) Nonremovable sliding or swing panels shall be permitted for access to the car or hoistway transparent enclosures for cleaning purposes. 2) Such panels or doors shall a) if hinged, open only into the car b) be provided with cylinder-type locks, having not less than a five-pin or a five-disc combination, or a lock that provides equivalent security, arranged so that they can be unlocked with a key from the car side, and the key shall be Group 2 Security (see 8.1) c) be openable by hand from the hoistway side d) be self-locking e) be provided with a device arranged so that the panel must be in the closed and locked position (see 2.26.2.31) before the elevator can operate f) have a bottom edge a minimum of 1 070 mm (42 in.) from the floor in cases where the adjacent hoistway wall is more than 140 mm (5.5 in.) from the car enclosure or where there is no adjacent hoistway wall.	N/A <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>  <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>  <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>  <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>





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<i>Car Enclosure</i>	<b>A17.1 (A17.2)</b>	<b>COMMENTS</b>	<b>CARS 1-3</b>
Telephone / communication Device <b>Note: Oregon amendment 2.27.1.2 requires that a communication device be installed in each elevator and be capable of connecting to a 24-hour location. The device must be ADA compliant in accessible elevators. Dedicated telephone lines are not required, but the failure or use of any single device connected to same telephone line cannot render the elevator telephone inoperative.</b>	2.27.1.1.1	1) A two-way communications means between the car and a location in the building, that is readily accessible to authorized and emergency personnel shall be provided.	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
	2.27.1.1.2	2) When the two-way communications location in the building is not staffed <u>24 h a day</u> , by authorized personnel who can take appropriate action, the means of two-way communications shall automatically be directed within <u>30 s</u> to an additional on- or off-site location, staffed by authorized personnel, where an appropriate response can be taken.	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
	2.27.1.1.3	3) The two-way communication means within the car shall comply with the following requirements: .....	.....
	2.27.1.1.3(b)	a) A push button to actuate the two-way communication means shall be provided in or adjacent to a car operating panel. The push button shall be visible and permanently identified as "HELP." The identification shall be on or adjacent to the "HELP" button. When the push button is actuated, the emergency two way communication means shall initiate a call for help and establish two-way communications.	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
	2.27.1.1.3(c)	b) A visual indication on the same panel as the "HELP" push button shall be provided, which is activated by authorized personnel, to acknowledge that two-way communications link has been established. The visual indication shall be extinguished when the two-way communication link is terminated.	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
	2.27.1.1.3(d)	c) The two-way communication means shall provide on demand to authorized personnel, information that identifies the building location and elevator number and that assistance is required.	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
	2.27.1.1.3(e)	d) After the call acknowledgement signals are sent [2.27.1.1.3(c)], the two-way voice communications shall be available between the car and authorized personnel.	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
	2.27.1.1.3(f)	e) The two-way communications, once established, shall be disconnected only when authorized personnel outside the car terminate the call.	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
	2.27.1.1.3(g)	f) The two-way communication means shall not use a handset in the car.	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
	2.27.1.1.3(h)	g) The two-way communications shall not be transmitted to an automated answering system. The call for help shall be answered by authorized personnel.	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
2.27.1.1.3(i)	h) Operating instructions shall be incorporated with or adjacent to the "HELP" button.	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	

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<b>Car Enclosure</b>	<b>Req.</b>	<b>Comments</b>	<b>Cars 1-3</b>
Freight Car Enclosure	2.14.3.1	1. Must be of metal without openings to a height of 1830 mm (72"). 2. Must extend to at least 150 mm (6") either side of counterweights (when provided) 3. Perforations above 1830 mm (72") shall reject a 38 mm (1") diameter ball.	N/A <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
(Freight Elevator)> N/A <input type="checkbox"/>	2.16.2.2.1 2.16.2.2.2 2.16.2.2.3(a)	1) <input type="checkbox"/> Class A: General Loading 240 kg/m <sup>2</sup> (50 lb/ft <sup>2</sup> ) 2) <input type="checkbox"/> Class B: Motor Vehicle Loading 145 kg/m <sup>2</sup> (30 lb/ft <sup>2</sup> ) 3) <input type="checkbox"/> Class C1: Industrial Truck Loading (static load during loading & unloading does not exceed rated load) a) 240 kg/m <sup>2</sup> (50 lb/ft <sup>2</sup> )	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
	2.16.2.2.3(b)	4) <input type="checkbox"/> Class C2: Industrial Truck Loading (static load during loading & unloading may exceed rated load) a) 240 kg/m <sup>2</sup> (50 lb/ft <sup>2</sup> )	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
	2.16.2.2.3(c)	5) <input type="checkbox"/> Class C3: Loading with Heavy Concentrations a) 240 kg/m <sup>2</sup> (50 lb/ft <sup>2</sup> )	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
Freight Elevator Signs 2.16.5.2 Minimum 13 mm (½") high lettering.	2.16.5.1.1	1) " <b>CLASS A LOADING.</b> ELEVATOR TO BE LOADED OR UNLOADED MANUALLY OR BY MEANS OF HAND TRUCKS ONLY. NO SINGLE PIECE OF FREIGHT OR SINGLE HAND TRUCK AND ITS LOAD SHALL EXCEED _____ KG (_____ LB)." 2) " <b>CLASS B LOADING.</b> THIS ELEVATOR DESIGNED TO TRANSPORT MOTOR VEHICLES HAVING A MAXIMUM GROSS WEIGHT NOT TO EXCEED _____ KG (_____ LB)." 3) " <b>CLASS C1 LOADING.</b> THIS ELEVATOR DESIGNED TO TRANSPORT LOADED INDUSTRIAL TRUCK. MAXIMUM COMBINED WEIGHT OF INDUSTRIAL TRUCK AND LOAD NOT TO EXCEED _____ KG (_____ LB)." 4) " <b>CLASS C2 LOADING.</b> THIS ELEVATOR DESIGNED FOR LOADING AND UNLOADING BY INDUSTRIAL TRUCK. MAXIMUM LOADING AND UNLOADING WEIGHT WHILE PARKED NOT TO EXCEED _____ KG (_____ LB). MAXIMUM WEIGHT TRANSPORTED NOT TO EXCEED _____ KG (_____ LB)." 5) " <b>CLASS C3 LOADING.</b> THIS ELEVATOR DESIGNED TO TRANSPORT CONCENTRATED LOADS NOT TO EXCEED _____ KG (_____ LB)." 6) For elevators not permitted to carry passengers, the sign shall read: " <b>THIS IS NOT A PASSENGER ELEVATOR. NO PERSONS OTHER THAN THE OPERATOR AND FREIGHT HANDLERS ARE PERMITTED TO RIDE ON THIS ELEVATOR.</b> " 7) For freight elevators permitted to carry passengers (see 2.16.4), a sign reading " <b>PASSENGERS ARE PERMITTED TO RIDE THIS ELEVATOR.</b> "	N/A <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>  N/A <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>  N/A <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>  N/A <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>  N/A <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
	2.16.5.1.2		<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
	2.16.5.1.3		<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>

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MACHINE ROOM			Req.	COMMENTS	M/R 1-3
Access to and location of Machine Room  Keys shall be kept on the premises accessible only to maintenance and emergency personnel. (Group 2 Security)			2.7.3 > 2.7.3.2 >	1) Clear and unobstructed passage to door 2) Access Across Roofs: ..... a) Swing door and platform from top floor to roof. b) Hatch type doors must have assisted opening (springs, hydraulics, cwt. etc.) c) Illuminated access route (eff. 10/1/99)	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> .....N/A <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
			2.7.3.2.2 >	3) If roof slopes over 15°:..... a) Walkway to M/R door must be provided not less than 600 mm (24") wide.	.....N/A <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
			2.7.3.3 > 2.7.3.3.1 >	b) Down side must have 1100 mm (43") handrail.	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
			2.7.3.3.2 >	4) Access to differing levels of M/R and from roof to M/R and machinery spaces:..... a) If level is > 200 mm (8"); non-combustible ladder or stair.	.....N/A <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
			2.10	b) If level is > 900 mm (35"), a stair must be provided equipped with handrails.	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
			2.7.3.2.2 >	c) Railings on upper level to 1070 mm (42") high.	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
			2.7.3.3.3 >	d) Ladders must comply with ANSI A14.3.	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
			2.7.3.3.4 >	e) Railings to comply with ANSI A1264.1.	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
			2.7.3.3.5 >	f) Stairs must be between 30° and 50° from horizontal.	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
				g) Platform or floor shall be provided at top of access stair.	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
				i) If door swings outward; minimum 600 mm (24") plus door swing.	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
				ii) If door swings inward; minimum 750 mm (30")	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
			Angle of Stair	Rise	Tread Run
<input type="checkbox"/> 30° 35'	165mm (6½")	280mm (11.0")	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> N/A <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>		
<input type="checkbox"/> 32° 08'	170mm (6¾")	273mm (10¾")	and conform to following regulations for industrial stairs regarding slope, width, run and rise, and handrails.		
<input type="checkbox"/> 33° 41'	178mm (7.0")	267mm (10½")	The stair shall be a minimum of 560 mm (22 in.) in width. Fixed stairs shall be not less than 30° nor more than 50° from horizontal. A uniform combination of rise and tread dimensions shall be permitted to be used. The following table gives permissible run and rise dimensions that will produce a stair that complies with this requirement.		
<input type="checkbox"/> 35° 16'	184mm (7¼")	260mm (10¼")	Stair treads and platforms shall be reasonably slip-resistant. Standard railings shall be provided on both sides of any stair with a width of 1100 mm (43 in.) or less and with four or more risers. For stairways wider than 1100mm (43 in.), only one handrail is required, preferably on the right hand side, descending. Railings shall comply with Section 2.10.		
<input type="checkbox"/> 36° 52'	190mm (7½")	255mm (10.0")	<i>Note: where the stair to the machine room or machinery space is also an egress stair, the stair must comply with the requirements of the building code.</i>		
<input type="checkbox"/> 38° 29'	197mm (7¾")	248mm (9¾")	<b><i>In the check box in the column, "angle of stair", indicate the closest angle of the installed stairway.</i></b>		
<input type="checkbox"/> 40° 08'	200mm (8.0")	240mm (9½")	<b><i>If the angle is outside this range, indicate the actual angle.&gt;</i></b>		
<input type="checkbox"/> 41° 44'	210mm (8¼")	235mm (9¼")	°		
<input type="checkbox"/> 43° 22'	216mm (8½")	228mm (9.0")	(to the nearest degree)		
<input type="checkbox"/> 45° 00'	222mm (8¾")	222mm (8¾")	°		
<input type="checkbox"/> 46° 38'	228mm (9.0")	216mm (8½")	(to the nearest degree)		
<input type="checkbox"/> 48° 16'	235mm (9¼")	210mm (8¼")	°		
<input type="checkbox"/> 49° 54'	240mm (9½")	200mm (8.0")	(to the nearest degree)		
Access to and location of Machine Room <input type="checkbox"/> All elevators in same M/R  <b><u>Note: machine spaces and control spaces are not yet part of code; alternate methods or exceptions are required.</u></b>			3.7.2 Ore. Amend.	1. Within 6 m (20') of hoistway if unless elevator can be seen from machine room entrance. 2. Clear and unobstructed passage to door.	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>

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MACHINE ROOM	Req.	COMMENTS	M/ R 1-3
Access to Overhead & Secondary Machinery Spaces	2.7.3.4	1) Openings in M/R floors must have either doors or 1100 mm (43") high railings around opening.	N/A <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
	2.7.3.4.3	2) <u>Where complete bodily entry not necessary:</u> ..... a) Sized for access and maintenance of equipment located therein. b) Maximum 600 x 600 mm (24" x 24") c) Lockable access doors/panels.	.....N/A <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
	2.7.3.4.1	3) <u>Machine rooms &amp; overhead spaces.</u> ..... a) M/R doors shall be a minimum 1830 mm (72") high and 750 mm (30") wide. b) Overhead-space: 750 mm x 750 mm (30 in. x 30 in.) i) Self-closing and self locking c) Provided with door sign (see next block for requirements). d) Overhead emergency stop switch required.	.....N/A <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> N/A <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
Exceptions to Stairways <b>Oregon amendment</b>	2.7.3.3.6	1) Vertical ladders with handgrips shall be permitted to be used in lieu of stairs under the following conditions: a) Access to an overhead machinery space is less than 2440-mm (96-in.) from floor level and access to the overhead machinery space is from within the machine room; or..... b) In existing buildings where installation of a stair would require alterations to structural elements or the stair would obstruct an egress corridor.	N/A <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> .....N/A <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
		2) Fixed ladders, when installed, shall be provided with a means for safely transporting tools and maintenance materials to and from the upper machinery level. a) The means shall be operable from the top and bottom of the ladder.	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
		3) Where the access door or panel is through the side of the machinery space, the ladder shall terminate at a landing conforming to ANSI A14.3, Section 6.	N/A <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
Machine Room Door & Sign	2.7.3.4.5 Ore. Amend.	<b>"AUTHORIZED PERSONNEL ONLY - Storage or installation of equipment not pertaining to the elevator is prohibited"</b> 1) 9.5 mm (3/8") high letters @ 1524 mm (60") 2) Door is to be a min. 750 mm (29.5") wide by 2030 (80") in height 3) Self-closing and self-locking 4) If rating is required check for labeling 5) Keys to be kept on premises – Security Group 2	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
Headroom	2.7.4.1 (2.2.3)	1) Minimum 2130 mm (84") clear throughout entire machine room. Some minor exceptions may be permitted in corners and close to walls.	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
Enclosure	2.7.1.1	1) Check for proper construction rated or non-rated. Taped sheet rock.	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
	2.7.1.2	2) Enclosure and M/R door must be equivalent fire rating to the hoistway.	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
Ventilation	2.7.5.2 (2.6.3)	1) Ventilation must be: a) Natural; or b) Mechanical c) Temperature range must be maintained to: i) Manufacturers Specs: or (Oregon amendment); or ii) Between 13° C - 38° C (55° F- 100° F)	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
	3006.2	2) Where applicable on roped hydraulic elevators: a) Openings in M/R floors for hoist ropes cannot be any larger than needed for the hoist ropes plus 50 mm (2-in.).	N/A <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>

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MACHINE ROOM	Req.	COMMENTS	M/ R 1-3
Housekeeping	8.6.4.8.1 (2.8)	1) M/R should be clean	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
Pipes, Ducts & Wiring	2.8.2.1 (2.8.3)	1) No unrelated pipes, ducts or wiring. 2) Only related wiring may pass from the machine room to the hoistway.	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
Shunt Trip Device (See testing section on this checklist)	2.8.2.3.2	Required if M/R or top of H/w is sprinklered: 1) Must be located in M/R 2) May be a combination with disconnect as long as both functions are retained.	N/A <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
Guarding of Exposed Equip	2.10.1	1) Exposed gears, sprockets and sheaves shall be guarded.	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
Equipment Numbering All cars in same machine room or space? Yes <input type="checkbox"/> No <input type="checkbox"/> ; there are _____ M/R/space(s).	2.29.1 620-51	1) Required where multiple driving machines are in the same room. 2) Disconnecting means. 3) Controllers 4) Pump units	N/A <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
Illumination <b>Enter Measurements on Data Sheet</b>	2.7.5  620.23  2.7.5.1	1) Minimum 200 lx (19 ftc) @ floor level; evenly distributed. 2) Fixtures must be of the type that will not allow lamps that will produce less than minimum illumination. 3) Must be on a dedicated branch circuit 4) Shall not be connected to the load side of a GFCI 5) Light switch to be within easy reach of strike side of M/R door	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
Main Line Disconnect	NFPA 70 620-51 (2.11.3)	1) Fused disconnect or circuit breaker, lockable in the open position. 2) Must be located within 600 mm (24") of the open side of the M/R door. (OAR 918-305-0250) 3) Sign to indicate feeder breaker location (620-51(d))	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
Car Lighting Disconnect	NFPA 70 620-53 (2.11.3) 620.22	1) Lockable Unit for each Elevator Controlling 120vac to car 2) Separate branch circuit must be provided 3) Overcurrent protection required in M/R	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
Utilization Equipment (Equipment may include intercoms that are not part of the elevator control circuit)	NFPA 70 620.25	1) Ensure that disconnecting means is located in M/R. 2) Ensure overcurrent protection is provided for each device in M/R.	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
Electrical Clearances  Ensure electrical clearances are properly maintained in front of all electrical panels and disconnects located in the M/R.	110-26 (2.12.3)	1) Minimum width: 30" or width of controller, whichever is greater. 2) Minimum height from floor: 6'6".	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
		Condition                      1                      2                      3	
		0-150v                      900 mm (36")                      900 mm (36")                      900 mm (36")	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
		151-600v                      900 mm (36")                      1000 mm (42")                      1200 mm (48")	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
Working Clearances	2.7.2.2.1 Ore. Amend.	1) Minimum 610 mm (24") on all sides requiring access for maintenance and repairs.	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
Controller wiring, fuses and grounding.	2.8.1	1) Ensure proper fuses are installed and equipment is properly grounded. 2) Bonding conductors for lightning protection systems allowed in hoistway. 3) Lightning rod grounding down conductor not allowed hoistway. 4) Art. 350-14; Flexible metal conduit is permitted under the following conditions: a) Flex can not exceed 1830 mm (72") i) Note: Liquid tight flex allowed in lengths over 1830 mm (72") b) Rating can not exceed 20 amps load c) Used only with fittings listed for grounding	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>

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MACHINE ROOM	Req.	COMMENTS	Cars 1-3
Electrical Assembly* Approved Testing Labs:  If unit is not labeled, it must be field certified by a testing lab or replaced with properly certified unit unless otherwise authorized by Salem.	2.26.4	Certification to CSA B44.1/ASME A17.5; Provide cert. or listing number: (Label #1: _____) (Label #2: _____) (Label #3: _____)  UL- <input type="checkbox"/> CSA- <input type="checkbox"/> ETL- <input type="checkbox"/> MET- <input type="checkbox"/> Other: <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
Hydraulic Power Unit	3.24.1.1 (2.16.3) 3.24.3.3  3.24.3.1	1) Working Pressure must appear on plate 2) Liquid level indicator; a) Must be of the type that can be checked without removing covers 3) Covers and venting	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>  <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>  <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
Pressure Tanks	3.24.4 (2.16.3)	1) Unless covered by A17.1, must conform to ASME Boiler and Pressure Vessel Code	 N/A <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
Control Valve Type: #1: _____ #2: _____ #3: _____	3.19.4.3-4 (2.15.3)	1) Ensure valve is of the type that comprises a check valve and manual lowering. 2) Manual lowering speed limited to 0.10 m/s (20 fpm)	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>  <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
Flexible Hoses and Fittings Labeling must contain: <i>Mfg. name or trademark;</i> <i>Type of hose &amp; fitting;</i> <i>Min. factory test pressure;</i> <i>Min. bending radius;</i> <i>Date of installation;</i> <i>Inspection procedure.</i>	3.19.3.3 (2.17.3)     8.6.5.6	1) H/P hoses shall: a) Not be installed in hoistways or through walls. b) Be wire reinforced as specified by SAE J5 17D c) Withstand 5 times working pressure d) Must be provided with a line overspeed valve (refer to 3.19.4.7) e) Marked with a replacement date no more than 6 years from installation f) Labeled as indicate in the first column	 N/A <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
Tank Fastenings	8.4.11.6	1) Must be prevented from being overturned	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
Supply Line and Shut Off	3.19.4 Ore. Amend (3.19.4.2)	1) Fittings and piping and valves shall: a) Located in M/R (Note: Pit shut-off also required). b) Have a safety factor of 5 c) (Mfg. psi x mfg. SF/5 = allowable working psi) d) Cannot be cast iron, malleable iron or certain brass or bronze materials.	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
GFI 15 & 20 Amp Receptacles	NFPA 70 620-85	1) Must be of the GFCI type.	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
Fire Extinguisher (Class ABC)	8.6.1.6.5 (2.7)	1) Located within easy reach of the access door 2) Current dated inspection tag. (Note: size of extinguisher is not specified in code).	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
Machine Room Inspection Control (where provided)	3.26.2 (2.26.1.4.4)	1) Shall operate the car at no more than 75 m/s (150 fpm.) Actual _____ fpm. 2) Shall be of the continuous pressure type. 3) Transfer means must be located in the machine room. 4) Clearly marked "on-off" 5) Must not operate if either in-car or car top inspection control is active or in door bypass mode	 N/A <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
Code Data Plate	8.9.1	1) Located on mainline disconnect or controller. 2) Indicate code for inspections and tests. 3) State ID tag may be used to supply such information	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
Installation Permits	OAR 918-400-400	1) To be located in the M/R in clear view & not to be removed from site until passed.	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
Limited Elevator Journeyman Licensee and/or Electrician <i>TM's work must be signed-off by licensed journeyman Permits must be signed!</i>	ORS 479.630(6)	Name: _____ License #: _____	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>

# PASSENGER & FREIGHT HYDRAULIC ELEVATOR

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MACHINE ROOM	Req.	COMMENTS	Cars 1-3
<b>NFPA 13 (2002) Installation of Sprinkler Systems</b>			
<b>8.14.5 Elevator Hoistways and Machine Rooms</b>			
<p><b>8.14.5.1</b> Sidewall spray sprinklers shall be installed at the bottom of each elevator hoistway not more than 0.61 m (2-ft.) above the pit floor.</p> <p><b>8.14.5.2</b> The sprinkler required at the bottom of the elevator hoistway by 8.14.5.1 shall not be required for enclosed, non-combustible elevator shafts that do not contact combustible hydraulic fluids.</p> <p><b>8.14.5.3</b> Automatic sprinklers in elevator machine rooms or at the tops of hoistways shall be of ordinary or intermediate-temperature rating.</p> <p><b>8.14.5.4</b> Upright or pendent spray sprinklers shall be installed at the top of elevator hoistways.</p> <p><b>8.14.5.5</b> The sprinkler required at the top of the elevator hoistway by 8.14.5.4 shall not be required where the hoistway for passenger elevators is noncombustible and the car enclosure materials meet the requirements of ASME A17.1, Safety Code for Elevators and Escalators.</p>			
<p>Note: Hoistway wall construction that contains wood framing is considered combustible despite a 1 or 2-hour rating. In addition, hydraulic fluid is considered combustible despite a relatively high ignition temperature.</p>			
<b>NFPA 72 (2002) National Fire Alarm Code</b>			
<b>6.15.3 Elevator Recall for Fire Fighters' Service</b>			
<p><b>6.15.3.1</b> System-type smoke detectors or other automatic fire detection as permitted by 6.15.3.7 located in elevator lobbies, elevator hoistways, and elevator machine rooms including machine space, control room, and control space used to initiate fire fighters' service recall shall be connected to the building fire alarm system.</p> <p><b>6.15.3.2</b> In facilities without a building fire alarm system, these smoke detectors or other automatic fire detection as permitted by 6.15.3.7 shall be connected to a dedicated fire alarm system control unit that shall be designated as "elevator recall control and supervisory panel", permanently identified on the control unit and on the record drawings. Unless otherwise required by the authority having jurisdiction, only the elevator lobby, elevator hoistway, and the elevator machine room smoke detectors shall be used to recall elevators for fire fighters' service.</p> <p><b>6.15.3.3</b> Unless otherwise required by the authority having jurisdiction, only the elevator lobby, elevator hoistway and the elevator machine room smoke detectors or other automatic fire detection as permitted by 6.15.3.7 shall be used to recall elevators for fire fighters' service.</p> <p><b>6.15.3.4</b> Each elevator lobby, elevator hoistway, and elevator machine room smoke detectors or other automatic fire detection as permitted by 6.15.3.7 shall be capable of initiating elevator recall when all other devices on the same initiating device circuit have been manually or automatically placed in the alarm condition.</p> <p><b>6.15.3.5</b> A lobby smoke detector shall be located on the ceiling within 6.4 m (21-ft.) of the centerline of each elevator door within the elevator bank under control of the detector.  <i>Exception: For lobby ceiling configurations exceeding 4.6 m (15 ft.) in height or that are other than flat and smooth, detector locations shall be determined in accordance with Chapter 5.</i>  <i>Note: The OESC defines an elevator lobby as the area in front of the elevator where persons normally wait for the elevator. This distance is typically a radius of 4-6 ft. from the center of the elevator door. This distance may vary depending on site conditions. However, if the detector is in compliance with 6.15.3.5 the installation is acceptable.</i></p> <p><b>6.15.3.6</b> Smoke detectors shall not be installed in unsprinklered elevator hoistways unless they are installed to actuate the elevator hoistway smoke relief equipment.</p> <p><b>6.15.3.7</b> If ambient conditions prohibit installation of automatic smoke detection, other automatic fire detection shall be permitted.</p> <p><b>6.15.3.8</b> When actuated, each elevator lobby, elevator hoistway, and elevator machine room smoke detector or other automatic fire detection as permitted by 6.15.3.7 shall initiate an alarm condition on the building fire alarm system and shall visibly indicate, at the control unit and required remote annunciators, the alarm initiation circuit or zone from which the alarm originated.</p>			
Indicate Condition	Description	Door Rating	Machine Room
1 <input type="checkbox"/>	Machine room shares a common wall, floor or ceiling with the hoistway; Penetrations are not fire-stopped; and Door opens to exterior of building.	N/A	1 or 2 hr.
2 <input type="checkbox"/>	Machine room is located above the roof level.	N/A	N/A
3 <input type="checkbox"/>	Machine room shares a common wall, floor or ceiling with the hoistway; and Penetrations are properly fire stopped.	N/A	N/A
4 <input type="checkbox"/>	Machine room does not share a common wall, floor or ceiling with the hoistway.	N/A	N/A
5 <input type="checkbox"/>	Machine room shares a common wall, floor or ceiling with the hoistway; Penetrations are not fire-stopped; and door opens to interior of building.	1 or 2 hr.	1 or 2 hr.





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TOP OF CAR & HOISTWAY	Req.	COMMENTS	Cars 1-3
Sheetrock Screws Penetrating into Hoistway <i>(Oregon amendment)</i>	2.1.1.3 (3.10)	1) Sharp protrusions in areas that require maintenance shall be removed or guarded. (Usually around jambs and door panels). 2) Verify multiple hoistways are constructed in compliance with the building code. Measure the running clearances between cars including equipment attached to the car. 3) Projections should be properly beveled or otherwise protected. 4) For elevators with no top emergency exit installed in unenclosed hoistways, determine that all landings are provided with either hoistway entrances or emergency doors.	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>  <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>  <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>  <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
Hoistway Construction <input type="checkbox"/> Rated <input type="checkbox"/> Non-rated <input type="checkbox"/> Existing	2.1.1 (3.10.3)	1) If hoistway is fire rated, ensure that there are no open penetrations through interior surface of walls. 2) Ensure that elevator door entrance frames are properly interfaced with wall construction.	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>  <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
Hoistway Smoke Control	2.1.4 (3.11)	1) Must be in accord with the OSSC. 2) Pressurization is allowed, but airflow cannot impinge on the operation of the elevator. 3) Check that means to prevent the accumulation of smoke and hot gases in case of fire is in accordance with the requirements of the building code.	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>  <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
Hoistway Ventilation <i>8 m (25') or more measured from the bottom landing to the underside of the hoistway ceiling</i>  Indicate actual size of vent: <input type="checkbox"/> H/W #1 _____ ft <sup>2</sup>  <input type="checkbox"/> H/W #2 _____ ft <sup>2</sup>  <input type="checkbox"/> H/W #3 _____ ft <sup>2</sup> <i>If vent is not provided when site conditions appear to require same, contact the local building department for consultation.</i>  <input type="checkbox"/> Existing Equipment	Chapter 30 3004 3004.3	Area of vents. 1) Except as provided for in section 3004.3.1, the area of the vents shall not be less than 3½ percent of the area of the hoistway; nor a) less than 3 square feet (0.28 m2) for each elevator car, and b) not less than 3½ percent nor less than 0.5 square foot (0.047 m2) for each dumbwaiter car in the hoistway, whichever is greater. c) Of the total required vent area, not less than one-third shall be of the permanently open type unless all vents activate upon detection of smoke from any of the elevator lobby smoke detectors. 2) Exceptions: If the building is fully sprinklered, vents are <b>only</b> required for the following occupancy groups: a) R-1 – Residential..... i) Boarding houses, hotels/motels (transient) b) R-2 – Residential..... i) Apts. convents, dormitories, fraternities, monasteries, vacation timeshare, hotels/motels (non-transient) c) I-1 – Institutional..... i) residential board & care, ALF's, halfway houses, congregate care residences, rehab facilities, alcohol/drug centers, & convalescent homes. d) I-2 – Institutional..... i) Hospitals, nursing homes, mental hospital, detox centers, outpatient clinics	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>  <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>  <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>  <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>  <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> N/A <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> N/A <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> N/A <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
Wiring ( Refer to NFPA 70 Table 400) Use Listed Traveling Cables. SO Cord not legal for travelers!	NFPA 70 620-11 620-21	1) Hi-temp door lock wire 2) Elevator Traveling Cable 3) Flame retardant wiring throughout	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>

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TOP OF CAR & HOISTWAY	Req.	COMMENTS	Cars 1-3
Counterweights (Where provided)  <input type="checkbox"/> Existing Equipment	8.4.7  3.33.3.2 (3.33)	1) Seismic requirements apply to elevators with rated speed of 0.75 m/s (150 fpm) or greater. 2) Hydraulic Elevators..... a) Verify the top counterweight clearance and bottom counterweight runby. b) Also, verify that a counterweight buffer is not provided. c) If a counterweight is provided and the space below the hoistway is not permanently secured against access, verify that a counterweight safety is provided.	N/A <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>  <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
Number of cars in Hoistway <i>(this should be checked by the local building inspectors and plan review department)</i>	Chapter 30 3003.1	1) Predicated on total number of cars in the building: a) All cars may be in same hoistway. ( ≤ 3 cars in bldg.) b) Must be in two separate hoistways. (= 4 cars in bldg.) c) No more than four in same hoistway. ≥ 5 or more cars in bldg.	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
GFI 15 & 20 Amp Receptacles	NFPA 70 620-85	1) Must be of the GFI type and shall not extinguish car top work light.	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
Top of Car Operating Station	3.26.2 (2.26.1.4)  3.26.4	1) Top-of car inspection operation shall conform to 2.26.1.4.1 and the following: a) A stop switch (see 2.26.2.8) shall be permanently located on the car top and readily accessible to a person, while standing at the hoistway entrance normally used for access to the car top. b) The transfer switch [see 2.26.1.4.1(b)] shall be located on the car top and shall be so designed as to prevent accidental transfer from the "INSPECTION" to "NORMAL" position. c) A separate device of the continuous-pressure type labeled "ENABLE" shall be provided adjacent to the inspection operating devices. d) The inspection operating devices shall become effective only when the "ENABLE" device is activated. e) The inspection operating devices [see 2.26.1.4.1(c)], shall be permitted to be of the portable type, provided that..... i) the "ENABLE" device [see 2.26.1.4.2(c)], and a stop switch, in addition to the stop switch required in 2.26.1.4.2(a) are included in the portable unit ii) the flexible cord is permanently attached so that the portable unit cannot be detached from the car top 2) Separate additional devices of the continuous pressure type shall be permitted to be provided on the car top to make power door opening and closing and automatic car leveling operative from the top of the car for testing purposes.	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>  <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>  <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>  <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>  <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>  <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>  <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>  <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>  <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
Car Top Work Light  Light readings are to be taken in the direction of the light source.	2.14.7.1.4	1) Must be provided with a guard 2) Car tops w/pendant style work lights must also be equipped with a stationary fixture (Ore. amend.) 3) Light switch must operate both lights. 4) Must provide a minimum of 50 lx (5 ftc) as evenly distributed as possible	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>  <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>

**PASSENGER & FREIGHT HYDRAULIC ELEVATOR**  
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TOP OF CAR & HOISTWAY	Req.	COMMENTS	Cars 1-3
<b>Clearances</b>			
Car Top Minimum Runby		1) Minimum runby: (Max. 600 mm (24")); Enter measurements on data sheet a) Rated speeds to 0.50 m/s (100 fpm); 75mm (3"); b) From 0.50 – 1 m/s (100-200 fpm); 75-150mm (3-6"); c) > 1 m/s (200 fpm); 150 mm (6")	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
Speed	Minimum Runby		
0.50 m/s (100 fpm)	75 mm (3 in.)		
0.75 m/s (150 fpm)	115 mm (4-½ in.)		
1.0 m/s (200 fpm)	150 mm (6 in.)		
Refuge Space	3.4.7 (3.4.3)	1) Minimum Area: a) 0.51 m <sup>2</sup> (5.49 ft. <sup>2</sup> ), 600 mm (24") (one side) b) 1100 mm (43 in.) high c) the horizontal area of the refuge space shall be outlined in a contrasting color on the car top. 2) In any area outside the refuge space where the vertical clearance between the top of the car enclosure and the overhead structure or other obstructions is less than specified in 2.4.12.1, the top of the car enclosure shall be clearly marked. a) The marking shall consist of..... i) alternating 100 mm (4 in.) diagonal red and white stripes. ii) In addition, a sign with the words "DANGER LOW CLEARANCE" iii) shall be prominently posted on the crosshead and be visible from the entrance. b) The sign shall conform to ANSI Z535.2 or CAN/CSA-Z321, whichever is applicable (see Part 9). The sign shall be of such material and construction that the letters and figures stamped, etched, cast, or otherwise applied to the face shall remain permanently and readily legible.	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> N/A <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> ..... <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
Top of Car Clearance	3.4.4	1) Minimum; Runby + Refuge = _____ mm ( _____ in.)	Enter on data sheet
Equipment Clearances	3.4.5	1) Minimum 150 mm (6") from overhead	
Horizontal Clearances (Refer to Oregon Structural Specialty Code for Seismic zones in Oregon. Typically all counties west of the Cascade range are in Zone 3. Eastern Oregon is zone 2B)  Refer to Page 58 of the A17.1 handbook.  <input type="checkbox"/> Existing Equipment	3.5 (3.14) 2.5.1.1  2.5.1.3 2.5.1.5  8.4.1.1	1) Minimum clearances required for all cars. (*No Seismic requirements apply in a) & b) below) a) Between car & hoistway; 20 mm (¾") min. on sides not used for loading & unloading b) Between cars; 50 mm (2") minimum. 2) Car sill to hoistway or fascia for full width of opening;..... a) 125 mm (5") maximum with horizontal doors. b) 190 mm (7½") maximum with vertical doors. 3) Cwt. Seismic Clearance Requirements (where provided).. a) Car to Cwt. assembly; minimum. 50 mm (2") b) Car to Cwt. assembly w/double "U" brackets; minimum 100 mm (4"). c) H/W to Cwt. assembly; minimum 50 mm (2"). d) Nearest obstruction to Cwt. assembly; minimum 25 mm (1").	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> ..... <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> N/A <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
Normal Terminal Limits	3.25.1	1) Normal Terminal Stopping Device 2) Emergency speed limit > 50 m/s (> 100 fpm) 3) Final limit (optional)	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
Crosshead Data Plate  <input type="checkbox"/> Existing Equipment	3.16 (3.27)	Items to be included on the data plate: 1) Weight of combined car frame & cab 2) Rated load and speed 3) Wire rope data (when applicable) 4) Manufacturer's name 5) Year manufactured	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>

**PASSENGER & FREIGHT HYDRAULIC ELEVATOR**  
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TOP OF CAR & HOISTWAY	Req.	COMMENTS	Cars 1-3
Floor Numbering	2.29.2	1) Numbers shall be not less than 100 mm (4") high	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
Emergency Identification (Multiple cars in bldg. only)	2.29.1	1) Car Top number shall be not less than 50 mm (2") high on crosshead or car top in visible location	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
Top Emergency Exit	2.14.1.5 (2.14.1.5.2)	1) The exit shall comply with the following: a) Be not less than 0.26 m <sup>2</sup> (400 in <sup>2</sup> ) & 400 mm (16") on any side b) Have a clear space above the car top not less than 1100 mm (43"); or c) A clear space of not less than 600 mm (24") with a clear angle of 60° if exit is partially obstructed. d) Movable portion of suspended ceiling panels below escape hatch shall be restrained from falling. e) Exits not allowed on elevators in unenclosed H/W.	N/A <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
Hoistway Construction <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> Rated <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> Non-rated	3.1 (2.1.1)	1) If the hoistway is fire rated, ensure that there are no open penetrations through interior surface of walls.	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
Hoistway Smoke Control (Does not include venting)	3.1 (2.1.4)	1) Must be in compliance with the OSSC. 2) Pressurization is allowed. Air flow cannot interfere with the operation of the elevator or H/W equipment.	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
Windows	2.1.5	1) Windows & skylights are not allowed	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
Car Frame & Car Platforms	3.15	1) Check for loose connections on frame and platform. 2) Hillside washers or bevel headed bolts shall be used where applicable.	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
Guide Rails & Fastenings	3.23	Shall conform to 2.23 except as noted in Req. 3.23.1.1	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
Governors & Safeties	2.17 – 2.18	When provided, refer to Requirements 2.17.1 & 2.18.1	N/A <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
Car Top Enclosures Guardrails <i>Refer to 2.10 for configuration of standard handrails.</i>	2.14.1.7	Car top Guardrails are required when: 1) >300 mm (>12") from H/W enclosure to car (measured on all sides) 2) Must be non-combustible 3) Withstand a lateral impact of 135kg (300#) without appreciable deformation 4) Shall be to a maximum height of 1100 mm (43") allowing for overhead clearances in Req. 2.4.6 & 2.4.7. 5) Must extend from edge-to-edge. (Note: this requirement is not specified in code, but is necessary in order to protect the fall-potential.	N/A <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
Pipes, wiring and ducts	2.8.2  2.8.1.4 (OR Amend)	1) No unrelated wiring, ducts or piping allowed, except as noted in 2.8.2.1 to 2.8.2.3. 2) Sprinkler branch lines and risers must be located outside hoistway. 3) Electrical conduit, fittings and covers must be as follows: a) All wiring must be in approved raceway or conduit. b) (348-12) Conduit Supports every 3.048 m (10') & within 914 mm (3') of boxes. c) (362-8) Gutter Supports shall not exceed: i) Horizontal Runs; 1524 mm (5') to 3048 mm (10') ii) Vertical Runs; 4572 mm (15') d) (370-18) Plug Open "knockouts" e) (370-25) Outlet box covers must be provided. f) (370-28c) J-box covers required.	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
Projections & Recesses	2.1.6  Ore. Amend	1) The following shall apply: a) Only sills, headers, etc. may project into hoistway on entrance sides. b) Recesses are prohibited except to install elevator equipment. c) Ledges over 100 mm (4") must be beveled not less than 75° d) Top of setbacks shall be beveled at not less than 75° e) Glass enclosure framing may no more than 127 mm (5") without beveling if no hazard exists.	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>

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TOP OF CAR & HOISTWAY	Req.	COMMENTS	Cars 1-3
Hoistway Door Locking Devices (Req. 2.12.2)  Req. 2.11.11.7: Multi-panel Entrances. <i>Panels shall be with hoistway door interlocks on each driven panel, and provided with door closer(s) installed to comply with Req. 2.11.11.7.1 or 2.11.11.7.2. All panels shall move simultaneously when the car is at the landing.</i>	2.12.1	1) <i>Passenger Elevators:</i> a) Must be equipped with interlocks b) Listed to UL104 standard	N/A <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
	2.12.1 2.12.3	2) <i>Freight Elevators:</i> a) Must be equipped with interlocks b) Under 4572 mm (15') rise may have combination contacts and locks c) Locking elements must be engaged by 7.14 mm (9/32") before car can start.	N/A <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
	2.12.4.1	3) Door Locks must comply with the following: a) Subjected to lab tests specified in Part 8.3.3 (listed to UL104).	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
	2.12.4.2	4) Identification marking shall be as follows: a) Manufacturer's name or logo b) Lab name or logo c) Model or style number or letter d) Rated voltage (AC or DC) e) Rated current f) Rated test force & movement (for interlocks released by retiring cam) g) Month & year tested by lab	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
Traveling Cables	2.8.1	1) Traveling Cables must conform to the following: a) (620-11) Must comply with Table 400 b) (620-41) Properly supported at 30 m (100') or 61 m (200") lengths c) (620-43) Shall be protected from damage and snags d) (620-44) Run in lengths no greater than 1830 mm (72") outside gutter or conduit. e) (620-83) Be properly grounded to the car.	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>

**PASSENGER & FREIGHT HYDRAULIC ELEVATOR**  
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TOP OF CAR & HOISTWAY	Req.	COMMENTS	Car 1-3
Hoistway Doors	2.11 (3.17)	1) Check for proper type of door arrangement:	
Indicate Type	2.11.2.1	2) <i>Passenger elevators</i> :.....	N/A <input type="checkbox"/>
<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> S/Sp. Side Slide		a) Horizontal slide (ADA requirement) Vertical allowed for non-ADA elevators	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> 2/Sp. Side Slide	2.11.11.4	b) Upthrust device	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> 3/Sp. Side Slide	2.11.11.5.1	c) Overlap on multi-speed doors, min. 13 mm ( 1/2").	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> S/Sp. C/O	2.11.11.5.2	d) Maximum clearance between panels and frames, 10 mm (3/8").	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> 2/Sp. C/O		e) C/O doors must have astragal.	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> 3/Sp. C/O	2.11.11.5.4	f) Raised molding, etc., max. 3.0 mm (1/8")	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> Single Swing	2.11.11.5.5	g) Must withstand 2104 N (526 lbf) applied at right angles to center of panel	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> Double Swing	2.11.11.5.7	h) Gibbs must engage sill by min. 6.35 mm (1/4").	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> Swing/Horizontal Comb.	2.11.11.6	i) Safety retainers (fire stops)	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> S/Sp. Vertical	2.11.11.8	j) Door/sight guard to sill edge 13 mm (1/2")	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> 2/Sp. Vertical	2.11.11.10	3) <i>Freight Elevators</i> :.....	N/A <input type="checkbox"/>
<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> 3/Sp. Vertical	2.11.12	a) Horizontal slide (see Req. 2.14.6.2 for clearances)	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> Bi-parting		b) Swing, single section	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> MANUAL	2.11.13	c) Horizontal-swing combination	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> POWER	2.11.13.5	d) C/O two section horizontal swing	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
<b>2.11.11.5; "They shall be securely anchored to the sills, and to the building structure or to the track supports such that they shall withstand the forces shown in Reqs. 2.11.11.3.1 and 2.11.11.8 without detachment or permanent deformation. Anchors and fastenings to suit the wall construction are required. The head of the entrance frames shall not be used to support the weight of the wall over the frame."</b>	2.11.12.8	e) Bi-parting counterbalanced	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
		f) Vertical slide counterweighted	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
	2.11.14/15	g) Pull straps for manual door types 'e' and 'f' above	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
	2.11.7.1 (4.3.3)	h) Double swing (limitations apply see Req.2.11.2.3)	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
		4) <i>Other door requirements</i> :.....	
		a) Sill guards or fascia	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
		b) Door panel listing & marking	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
		c) <i>Vision Panels</i> ; .....	N/A <input type="checkbox"/>
		i) Maximum 150 mm (6") on one side	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
		ii) Wired or laminated glass (Z97.1 or 16 CFR 1201	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
		iii) Maximum total area: 0.055 m <sup>2</sup> (85 in <sup>2</sup> )	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
		iv) Power Doors; must be substantially flush w/outside surface of door.	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
		v) Must be protected by grill work; see Rule 2.11.7.1.7 for details.	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
		vi) Required with manually operated or self closing hoistway doors at landings w/o position indicator	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
		d) <i>Glass panels</i> ; .....	N/A <input type="checkbox"/>
		i) Min. 60% of visible door area from outside hoistway;	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
		ii) Glass must be marked; and	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
		iii) Limited to one glass panel.	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
		5) Ensure smoke doors cannot prevent egress from the car or access to the car.	N/A <input type="checkbox"/>
		6) Frames; overlap wall on hoistway side & provide a uniform surface with wall.	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
	2.11.11.3	7) Securely anchored to wall and sill.	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
		8) Wall and doorframes must interface as per drawings to maintain listed fire rating.	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
	2.11.15	9) Marking & labeling of tested assembly; lab name, symbol or file no., statement of compliance w/8.3.4.	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
		<b>2.11.11.5.7 "The entrance assembly shall be capable of withstanding a force of 2500 N (562 lbf) applied on the landing side at right angles to and approximately at the center of a panel. This force shall be distributed over an area of approximately 100 mm (4 in.) by 100 mm (4 in.). There shall be no appreciable permanent displacement or deformation of any parts of the entrance assembly resulting from this test."</b>	

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OUTSIDE HOISTWAY	Req.	COMMENTS	Cars 1-3
Hoistway Enclosure	2.1.1 (4.8.3)	1) Ensure there are no questionable openings in enclosure around entrance frames. 2) If glass is used ensure that laminated glass is provided and properly marked. 3) Other items may need to be deferred to the building official	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
Emergency doors	2.11.1.1-2 (4.10.3)	1) Not normally required on hydraulic elevators. However if situation warrants, see Req. 2.11.11.1 & 2.11.11.2	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
Car Platform Guard	3.15 (4.1.3) {refer to 2.15.9}	1) Min. height of the leveling zone plus 75 mm (3"), but not less than 525 mm (21") high. 2) Minimum 1.5 mm (0.059 in) thick steel or equivalent material. 3) Must be equal to or greater than width of door opening. 4) Lower portion beveled between 60° & 75° 5) Must be adequately supported	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
Access to Hoistway	2.12.6.1 (4.5.3)  2.12.6.2.5  2.12.7.1.1  2.12.7.1.2  2.12.7.3.2	1) <i>Door Unlocking Devices</i> a) Hoistway door unlocking devices shall be provided for use by authorized and emergency personnel for each car at every landing where there is an entrance. b) Door unlocking access cannot be more than 2100 mm (83") from floor level. c) Keys are Security Group 1 2) <i>Hoistway Access Switches</i> ..... a) Hoistway access switches required for speeds > 0.75 m/s (150 fpm) b) < 0.75 m/s (150 fpm) switches required if top of car is more than 900 mm (36") from sill with car at next lower landing. c) Located at the lowest & top landings only. d) Maximum operating speed; 0.75 m/s (150 fpm.) e) Access cannot be operative if TOC inspection station is active. f) Bottom landing: upward travel limited to point where bottom of toe guard is even with header. g) Other landings: i) downward travel is limited to a point where car top is even with landing sill. ii) Upward travel limited to length of toe guard	N/A <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>  N/A <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> .....N/A <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
Hall Stations	A117.1 4.10.3	1) 1070 mm (42") to center line of fixture 2) 19 mm (3/4") min. button size	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
Door Jamb Braille Markings	A117.1 4.10.5	1) 1525 mm (60") on center from floor.	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
Fire Service Signs, Phase I	2.27.7	2) Located adjacent to the Phase I keyed switch	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
Fire Signs, Use Stairway	OSSC 3002.3	1) Required by the building code. See A17.1 Appendix O for sample pictograph. May be only one per group-system.	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
Standby Emergency Power	2.27.2.3 (4.12)	1) An illuminated signal marked "ELEVATOR EMERGENCY POWER" shall be provided in the elevator lobby at the designated level to indicate that the normal power supply has failed and the emergency or standby power is in effect.	N/A <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
The key shall be Group 3 Security (see 8.1); and	2.27.2.4.1	2) A selector switch(es) marked "ELEVATOR EMERGENCY POWER" in red lettering a minimum of 5 mm (0.25 in.) in height; and	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
	2.27.2.4.2	3) The selector switch(es) positions shall be marked to correspond with the elevator identification number (see 2.29) and a position marked "AUTO."	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>

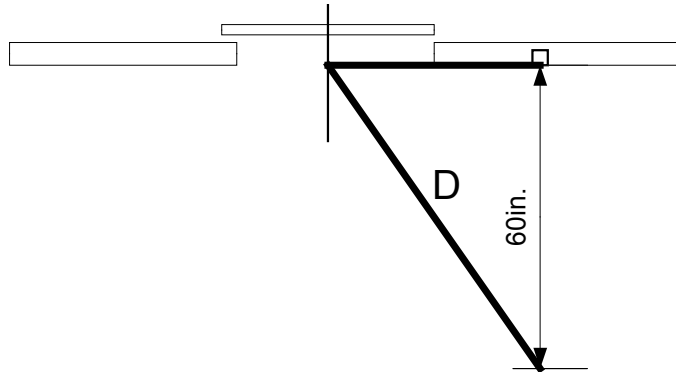
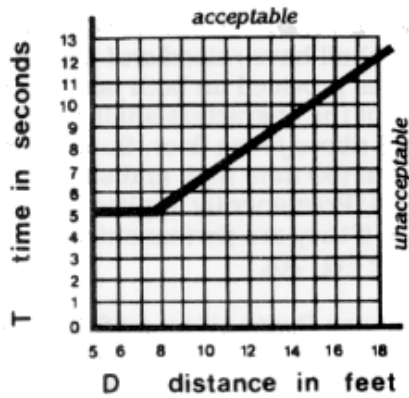
**PASSENGER & FREIGHT HYDRAULIC ELEVATOR**  
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OUTSIDE HOISTWAY	Req.	COMMENTS	Cars 1-3
Corridor Illumination <input type="checkbox"/> Existing Equipment	2.11.10.2	1) Minimum 100 lx (10 ftc) @ floor level w/doors closed. 2) Take nominal readings in front of each group of cars. In larger lobbies, multiple readings may be necessary.	Enter Values on Data Sheet
Power Closing of Hoistway Doors          Sequence Operation Required	2.13.3.1 (4.6.3)	1) Manual H/W Door w/Power Car Door a) When the car door is closed under power by automatic means created by momentary push button or timer control, the hoistway door must be closed before the car door can close. This feature not required if car door is controlled via constant pressure push button.	N/A <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
	2.13.3.2	2) Power Closing of Car & H/W doors via CPPB. (Horizontal or vertical) a) Gates and doors shall stop, or stop and reopen. Sequencing is not required.	N/A <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
	2.13.3.3 2.13.4.2.1	3) Power Closing of Car & H/W horizontal doors a) Automatic or momentary means pressure control. b) Kinetic energy must be observed and door open button required.	N/A <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
	2.13.3.4	4) Power Closing of Car & H/W doors by automatic means. (Vertical doors) a) Requires an audible warning device to sound at least 5 sec. prior to doors beginning to close. Delay may be omitted if close is started by push button. Sequence closing is required; door open button is required and a door-reopening device is required.	N/A <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
Anti-creep	(3.26.3.1)	1) Maintain car within 25.40 mm (1") of floor level. 2) Operate at a maximum speed of 0.125 m/s (25 fpm.) 3) Sign on disconnect shall read: a) <b>"KEEP SWITCH CLOSED EXCEPT FOR MAINTENANCE, REPAIRS, AND INSPECTIONS"</b> 4) Letters shall be a minimum 6.35 mm (¼") high. 5) Sign shall be of durable material 6) Anti-creep shall not operate if the following are activated: a) Recycling operation b) TOC inspection c) Hoistway access d) Low oil timer e) Oil tank temperature shutdown	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
Emergency Numbering (Multiple cars in bldg. only)	2.29.1	1) Elevator number is required at the designated level on each entrance frame. a) Minimum 75 mm (3-in.) high	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
Auxiliary Power Lowering Device (Battery Lowering Device)	3.26.10	1) Permitted, but not required. 2) Door open/close buttons shall be operable 3) May bypass or render inoperative, a) landing and car calls b) designated operation (attendant or hospital service) c) devices initiating emergency recall operation (refer to 3.27) d) fire operation (refer to 3.27) 4) Intermediate stops are allowed for descending car 5) Power doors shall open and close after a predetermined time. (The predetermined time is not specified by code).	N/A <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
Symbols  	OSSC 3002.4	1) "Star of Life" symbol [elevators with 4 or more stops] placed on at least one elevator with an interior to accommodate a 24" x 76" stretcher. 2) The symbol must be 75 mm (3-in.) in height and located on both sides of the entrance frames. The height from the floor is not specified but should be placed above the jamb tag.	N/A <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>



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OUTSIDE HOISTWAY	Req.	COMMENTS	Cars 1-3
Minimum Hall Call Door Time  $T = D / 1.5 \text{ ft/s}; \text{ or}$ $T = D / 455 \text{ mm/s}$	A117.1 4.10.1.7	1) The minimum acceptable time from notification that a car is answering a call until the doors of that car start to close shall be calculated from one of the following equations (see left column) where T = total time in seconds and D = distance (ft. or mm) from the point in the lobby or corridor 60 in. (1525 mm) directly in front of the farthest call button controlling that car to the centerline of its hoistway door.	Enter Values on Data Sheet



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PIT AREA	Req.	COMMENTS	Cars 1-3
Pit Access (Ladder design must comply with ANSI A14.3, Standard for Fixed Ladders.)  Walk-in Pit: Yes <input type="checkbox"/> No <input type="checkbox"/>  <input type="checkbox"/> Existing Condition	2.2.4 (5.1)	1) Pit ladders shall be installed in all pits greater than 900 mm (35") deep and shall conform to the following: a) Minimum 400 mm (16") wide unless reduced to allow for elevator equipment (min. 225 mm (9") in any case) b) Rungs 300 mm (12") on center c) Extend a minimum 1200 mm (48") above sill level d) Be not less than 180 mm (7-in.) from wall or nearest obstruction behind ladder. May be reduced to a minimum of 115 mm (4½") when necessary. e) Be not less than 1000 mm (39") measured horizontally from means to unlock egress door from pit.	N/A <input type="checkbox"/>  <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>  <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>  <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
	2.2.2.4	2) Pit Access Doors:..... a) Minimum 1825 mm (72") high by 750 mm (29.5") wide b) Self-closing & self locking c) Keys to be kept on premises – Security Group 1 d) If door swings out and structural or mechanical part of elevator projects into the door opening:..... i) Door contact required ii) Vision panel required: (1) wired or laminated glass (2) minimum 6 mm (¼") thick (3) reject a 150 mm (6 in) diameter ball (4) max. area of .03 m <sup>2</sup> (47 in <sup>2</sup> ) e) Barrier required if door sill is more than 300 mm (12 in.) above pit floor.	.....N/A <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>  <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
	2.2.8	3) Access to Underside of Car:..... a) Where the distance from the pit floor to the underside of the plank channels or slings exceeds 2100 mm (83-in.), with the car at the lowest landing, a means shall be permanently installed or permanently stored in the pit to provide access to the equipment on the underside of the car.	.....N/A <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
Stop Switch	2.2.6	1) Located by the access door; or when access is through bottom landing door: 2) Approx. 457 mm (18") above sill level; 3) Pits over 1700 mm (67") deep require a second stop switch located about 1200 (47") from floor.	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>  <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
Lighting & Light Switch  (Illumination shall be taken in direction of light source and readings should be done at least in front and back of the pit channels with the hoistway door closed. Depending on pit area, more than 1 reading may be necessary.)	2.2.5 (5.1)	The following shall apply:	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
	2.2.5.4 (OA)	1) Minimum 100 lx (10 ftc) illumination evenly distributed 2) Light switch located within easy reach of access door 3) Lamp(s) shall be guarded 4) Fixtures are to be of the type that will not allow installation of lamps of light output less than required to produce 100 lx (10ftc)	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
	620-24	5) Must be on a dedicated branch circuit and not on load side of GFCI.	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
	2.2.5.5 (OA)	6) Illumination measurements are to be taken in the direction of the light source.	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>

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PIT AREA	Req.	COMMENTS	Cars 1-3
Sump Pump or Drain <i>(Sump Pumps and drains are to be installed according to the Oregon Plumbing Specialty Code.</i> Discharge line location: <hr/> <hr/> <input type="checkbox"/> Existing Equipment	2.2.2.3	1) May be provided with the following: a) Sump pump with 24hr monitored alarm and power control switch located outside hoistway	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
	710.15 (OPSC)	2) Oregon Plumbing Specialty Code requires:..... Permanent means of drainage shall be provided for elevator pits. Gravity drains, when installed, shall be provided with an approved type backwater valve to prevent drain line backup and the trap seal shall be protected with an automatic trap seal primer. Sump and pump may be installed when provided with the following: a) A check valve to prevent water, gases, and odors from entering the pit. b) A secured and level cover over the sump. c) An automatic activation switch d) A minimum 1/3 hp rating. e) A minimum 1¼ (32 mm) discharge pipe. f) Sump size as recommended by the manufacturer. g) The outlet pipe of the pump shall be directly or indirectly connected to the inlet of a primed "P" trap. The "P" trap shall be connected to the sanitary drainage system. h) Single pumps shall be permitted.	..... <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
	620-85	3) Connected to a dedicated non-GFCI single receptacle 4) Sump shall be readily accessible for maintenance	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
Sump cover	2.2.2.6	1) Covers shall be: a) Substantially level with pit floor. b) Non-combustible c) Prevented from shifting sufficiently to expose sump opening. d) Fastenings should not be of the non-removable type.	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
Access to Pit Equipment <b>Oregon Amendment</b> <b>Note: This requirement only pertains to pits depths not covered under 2.2.8.</b>	2.2.4.5	1) Where elevated pit equipment requires vertical access of more than 1220-mm (48-in.), a permanent non-combustible working platform shall be provided. 2) The platform's height and surface area shall be determined by the equipment requiring access. 3) Access to the platform shall be by fixed ladder or stair. 4) The platform shall be of sufficient strength to support personnel and may be of open grillwork. 5) Platform railings, where required, shall comply with ANSI 1264.1.	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
Plunger and Cylinder <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> Direct Plunger <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> Holeless	3.18.3.3	1) Ensure the following: a) Plunger does not bottom out with car on buffers.	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
	3.18.3.7	b) Oil collection not more than 19 L (5 gal.)	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
	3.18.3.8	c) Below ground installations are provided with: i) Monitored cathodic protection ii) Cylinder coating iii) Protective Casing	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
	3.18.3.9	d) Cylinder air and gas relief	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
	3.18.4	e) Stop ring	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
Bottom Clearances	3.4.1	1) Bottom Clearances shall be as follows: a) Minimum 600 mm (24") to any equipment installed under platform except within a 300 mm (12") wide perimeter from the platform edge. This includes the bolster channels.	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
	3.4.1.6	b) If vertical clearance outside refuge area <600 mm (24"), shall be clearly marked w/red & white striping & "DANGER LOW CLEARANCE" sign. c) The refuge space shall be not less than: i) 600 mm (24")w x 1200 mm (48")l x 600 mm (24")h; or ii) 450 mm (18")w x 900 mm (36")l x 1070 mm (42")h	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>

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PIT AREA	Req.	COMMENTS	Cars 1-3
Bottom Runby	3.4.2.1	1) Minimum runby: (max. 600 mm (24"); Enter measurements on data sheet. a) Not less than 0.50 m/s (100 fpm); 75 mm (3"); b) From 0.50 – 1 m/s (100-200 fpm); 75 mm-150 mm (3"-6"); c) >1 m/s (200 fpm); 150 mm (6")	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
Car Buffer	3.22.1 (2.22)	1) Solid bumpers may only be used on cars with rated speed of 0.25 m/s (50 ft/min.) or less. a) Spring buffers _____ # b) Oil buffers _____ #	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
Normal Limits	3.25.1	1) Normal limits shall: a) Be operated by movement of the car b) Slow and stop the car in down direction c) Function independently of the normal stopping circuits d) Final limit is optional	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
Car Frame & Platform	3.15.1.1.4	1) Ensure plunger connection on direct plunger systems will not separate from car. 2) All bolster, side stile and platform fastenings are secure 3) Check for loose connections on frame and platform. 4) Hillside washers or bevel headed bolts shall be used where applicable. 5) Class B & C loading:..... a) Platform stringers shall be of steel or other metals 6) Class A loading:..... a) Platform stringers may be of steel, wood or other metals. 7) Wood Platforms:..... a) Must be covered with sheet metal or a fire retardant material; or b) Covered with a fire retardant coating.	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> .....N/A <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> .....N/A <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> .....N/A <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
Guiding Members	3.23	Ensure guide rail brackets in pit area are securely fastened	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
Traveling Cables & Electrical	2.8.2	1) Traveling Cables must conform to the following: a) (620-11) Must comply with Table 400 b) (620-43) Shall be protected from damage and snags c) (620-44) Run in lengths not greater than 6' outside gutter or conduit from point of suspension on car. d) (620-83) Be properly grounded to the car. e) Must not contact pit floor with car resting on buffers 2) When the pit is sprinklered, electrical equipment located less than 1220 mm (48") above pit floor must be (when not monitored by shunt trip): a) NEMA-4 enclosed (weatherproof); and b) Wiring identified for use in wet locations.	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
	2.8.2.3.5		<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
Supply Piping	3.19	1) Ensure piping is of appropriate size. (If piping is not distinguishable as to its rating; require documentation as to its characteristics.) 2) Ensure joints are properly fastened and there are no leaks 3) Connections shall only be one or more of the following types: (mark the appropriate type) a) Welded b) Threaded c) Grooved d) Bolted flange 4) An additional shut-off valve is required in the pit (Ore. Amend).	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
	3.19.4.2		<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>



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TESTING	Req.	COMMENTS	Cars 1-3
Inspection Operation with Door Locks & Gate Switches Bypassed.  Individual switches may be used to bypass groups of door locks.  <b>2.26.1.4</b> Machine room inspection operation is not allowed when door lock bypass switches are engaged.	2.26.1.5	1) The following shall be provided and located in the machine room:	N/A <input type="checkbox"/>
	2.26.1.5.2	a) Car door bypass switch	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
	2.26.1.5.1	b) Hoistway door bypass switch	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
	2.26.1.5.3	c) Clearly labeled with "bypass" and "open" positions	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
	2.26.1.5.4	d) Contacts opened mechanically & not dependent solely on springs	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
	2.26.1.5.8	e) Use of relays shall not render door locks inoperative if relay fails	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
	2.26.1.5.8	f) Shall only allow operation of car in inspection mode	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
	2.26.1.5.8	g) When both switches are in bypass mode car can be operated by only car-top or in-car inspection control.	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
	2.26.1.5.8	h) Warning sign required adjacent to bypass switches: <b>i) "Jumpers shall not be used to bypass hoistway-door or car-door electric contacts"</b>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
Faulty Door Lock Monitoring System	2.26.5	1) A means is required to monitor positions of power-operated car doors mechanically coupled to hoistway doors when at landing zone. 2) Operation must be prevented if car door is open even if gate switch is electrically closed. 3) Doors must be prevented from closing if fully open when: (except in Req. 2.26.1.5). a) Car door contact is made or bypassed b) The hoistway door at the landing is closed or bypassed.	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>  <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>  <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>  <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
Seismic/Overspeed Valve  Seismic Req. 8.4.11.2 Overspeed Valve Req. 3.19.4.7  Tested, tagged & sealed: 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/>	8.4.11.2  3.19.4.7.2  3.19.4.7.3	1) Test with full load in car. Visually witness test to ensure valve arrests downward movement of the car with rated load. 2) Provide dated tag and seal valve. 3) Marking: a) Manufacturer's name or trademark b) Type designation c) Component-rated pressure d) Maximum & minimum rated flow. 4) Location: a) Single jack arrangements: i) Within 300 mm (12") of hydraulic cylinder b) Multiple jack arrangements: i) May have one valve located within 300 mm (12") of each jack; or ii) May be positioned immediately before the tee. 5) Tripping speed: a) Minimum 110% of operating speed b) Maximum 140% of operating speed	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>  <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>  <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
Pressure Relief	3.19.3.2 (2.14.3)	1) Witness setting of hydraulic valve and record pressure settings. 2) Test to be performed with rated load in car. Relief to be set with car against stop ring. 3) Relief setting shall not exceed 150% of working pressure.	Enter readings on data sheet
Low Oil Protection	3.26.9	1) Suitable methods include: a) Direct sensing of liquid level; or b) Pump run-timer; or c) Other means; _____ 2) Upon activation the car shall: a) Return to the lowest level & after door time, doors shall close & require manual reset.	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>  <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
Test Log	8.11.1.7 (Ore. Amend)	1) Ensure log is marked with test date and placed in visual location within machine room	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
Pressure Switch	3.26.8	1) Required when top of cylinder is above tank. Witness actuation of this device.	N/A <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>

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TESTING	Req.	COMMENTS	Cars 1-3
Low Oil Protection	3.26.9	1) Suitable methods include: a) Direct sensing of liquid level; or b) Pump run-timer; or c) Other means; _____ 2) Upon activation the car shall: a) Return to the lowest level & b) after door time, doors shall close & c) requires a manual reset of system.	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
Shunt Trip Device Heat Detectors Located:	2.8.2.3.2	1) Activation device may be either: a) Heat detector located within 610 mm (24") of sprinkler head; or b) Flow sensor without time delay device. c) Device must be supervised through the fire alarm panel. 2) Shunt-trip must be located in elevator machine room. 3) Ensure that opening the disconnect will not trigger an alarm or trouble signal.	N/A <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
Hoistway <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> Machine Rm. <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> Pit <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>			
Speed Test	8.11.3.2.3(cc) (3.30.3)	Tachometer speed test; verify car speed in both directions: Up: _____ <input type="checkbox"/> m/s <input type="checkbox"/> fpm Dn: _____ <input type="checkbox"/> m/s <input type="checkbox"/> fpm	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
<b>NFPA 72 (2002) National Fire Alarm Code</b>			
<b>6.15.4 Elevator Shutdown</b>			
<b>6.15.4.1</b> Where heat detectors are used to shut down elevator power prior to sprinkler operation, the detector shall have both a lower temperature rating and a higher sensitivity as compared to the sprinkler.			
<b>6.15.4.2</b> If heat detectors are used to shut down elevator power prior to sprinkler operation, they shall be placed within 610 mm (2 ft) of each sprinkler head and be installed in accordance with the requirements of Chapter 5. Alternatively, engineering methods, such as specified in Annex B, shall be permitted to be used to select and place heat detectors to ensure response prior to any sprinkler head operation under a variety of fire growth rate scenarios.			
<b>6.15.4.3</b> If pressure or waterflow switches are used to shut down elevator power immediately upon or prior to the discharge of water from sprinklers, the use of devices with time delay switches or time delay capability shall not be permitted.			
<b>6.15.4.4</b> Control circuits to shut down elevator power shall be monitored for presence of operating voltage. Loss of voltage to the control circuit for the disconnecting means shall cause a supervisory signal to be indicated at the control unit and required remote annunciators.			
<b>6.15.4.5</b> The initiating devices described in 6.15.4.2 and 6.15.4.3 shall be monitored for integrity by the control unit required in 6.15.3.1 and 6.15.3.2.			
<b>ROPED HYDRAULIC</b>			N/A <input type="checkbox"/>
Car Safeties <input type="checkbox"/> Existing Equipment <b>Note:</b> The safety switches required must cause main drive power to be removed from the pump motor and control valve when safeties are activated.  Enter tripping speeds, etc. on data sheets.	3.17.1 {2.18.4.1}	1) Required on Roped Hydraulic Elevators: a) SOS switch b) Governor switch c) Overspeed switch for speeds > 0.75 m/s (150 fpm) d) Type A safeties for cars of 0.75 m/s (150 fpm) or less e) Governor maximum tripping speed i) 0-0.63 m/s (0-125 fpm)   0.75 m/s (175 fpm) trip ii) 0.75 m/s (150 fpm)   1.10 m/s (210 fpm) trip	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
Slack Rope Device	3.18.1.2.7 (3.31)	1) Slack rope switch must be of the enclosed manually reset type. 2) May be used as an additional means to initiate safety device	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
Roping Ratio	3.18.1.2	1) Shall not exceed 1:2	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
Governor Access	3.1 Oregon Amendment	1) Access to governors shall be from outside the hoistway unless governor can be tested and reset from outside hoistway.	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
Traveling Sheaves	3.23.2.2 (3.32.3.2)	1) Minimum 40 times diameter of rope 2) Minimum permissible groove bottom diameter 3) Finished grooves or lining	N/A <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>

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TESTING FIRE SERVICE	Req.	COMMENTS	Cars 1-3
Fire Service Phase I Recall Initiating Devices (Smoke detectors) (front/rear):	2.27.3.1	Req. 2.27.3 does not apply if: 1) Hoistway is not required to be fire rated: <i>and</i> 2) Travel does not exceed 2000 mm (80"); <i>and</i> 3) Does not penetrate a floor Keys are designated Security Group 3	N/A <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
Phase I sign shall read: <b>Fire Operation</b> To recall elevators insert fire key and turn to "ON"	2.27.3.1.1>	1) Phase-I 3-position keyed switch in lobby (RESET-OFF-ON). Key removable in OFF-ON position only.	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
<b>Detectors Tested</b>			
<b>Cars</b> <b>1 2 3</b>	Landing (Front)	Main & Alt. Landing	
<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	1 <sup>st</sup>		<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	2 <sup>nd</sup>		<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	3 <sup>rd</sup>		<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	4 <sup>th</sup>		<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	5 <sup>th</sup>		<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	6 <sup>th</sup>		<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	7 <sup>th</sup>		<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	Machine room		<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	Hoistway • N/A		<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
<b>Cars</b> <b>1 2 3</b>	Landin g (Rear)	N/A	
<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	1 <sup>st</sup>	<input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	2 <sup>nd</sup>	<input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	3 <sup>rd</sup>	<input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	4 <sup>th</sup>	<input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	5 <sup>th</sup>	<input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	6 <sup>th</sup>	<input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	7 <sup>th</sup>	<input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
<b>2.27.3.2.1</b> Detectors are to be located at each elevator lobby (optional at unenclosed landings) machine room and at the top of the hoistway if the top of the hoistway is sprinklered or the detector is used to activate a smoke control system. Refer to NFPA 72 (2002) for additional details.	2.27.3.1.6(i)	d) Ensure RUN-STOP-OVERRIDE is functional upon car leaving the landing.	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
	2.27.3.1.6(c)	e) Door reopening devices susceptible to smoke or flame shall be disabled.	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
	2.27.3.1.6(e) ref. 2.13.5.1	f) Must close under reduced speed: max. 3.5J (2.5 ft-lbf kinetic energy)	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
	2.27.3.1.6(f)	g) Ensure all hall and car calls are canceled; hall/car lanterns are disabled.	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
	2.27.3.1.6(h)	8) Visual and Audible signals..... a) An illuminated visual and audible signal system shall be activated. b) The visual signal shall be one of the symbols shown in Fig. 2.27.3.1.6(h) and located on the car operating panel. c) The entire circular or square area of the outline of the hat, or the outline of the area shown on fig. 2.27.3.1.6(h) shall be illuminated. d) The visual signal shall remain activated until the car is restored to automatic operation. e) When the door is open, the audible signal shall remain active for a minimum of 5 s. f) The audible signal shall not be active when the car is at the recall level.	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
	2.27.3.1.6(j)	9) Additional Fire Recall switch:..... a) Both Fire recall switches must be in the on position to recall elevator to main egress level if called to alternate landing first.	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
	2.27.3.1.6(k)	b) Removing elevator from Phase I Recall:..... i) Primary switch turned to Reset, then Off; ii) Second switch is in the Off position; and iii) Fire alarm devices are reset.	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
	2.27.3.1.6(l)	10) Means to remove elevators from service cannot interfere with Phase I recall unless specified in code.	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
	2.27.3.1.6(m)	11) Load weighing cannot override Fire Recall.	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>



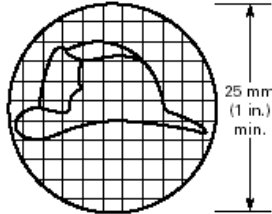
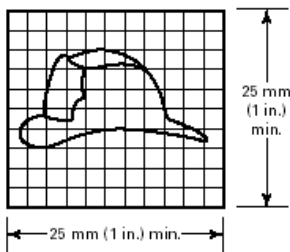
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TESTING FIRE SERVICE (Phase I cont.)	Req.	COMMENTS	Cars 1-3
Fire Alarm Initiating Devices (Smoke Detectors)	2.27.3.2.3	1) Fire Alarm Initiating Device Activation: a) Lobby Detectors (other than main landing) i) All cars serving that landing and any group cars shall return to the main egress level	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
		2) Machine Room Detectors..... a) All cars with equipment in the M/R and any group cars return to the main egress level unless M/R is on the main level. b) Cause the fire hat to illuminate intermittently.	..... <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
		3) Hoistway Detectors..... a) All cars in the hoistway and any group cars shall return to designated level. b) Detectors activated below the lowest landing will cause cars to return to the highest recall level. c) Cause the fire hat to illuminate intermittently.	..... <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
		4) Main Lobby Detectors..... a) Recall all cars to the alternate landing. b) If Fire Recall switch is already in the ON position, cars shall return to the main egress level.	..... <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
		5) The recall level shall be determined by the first activated fire alarm initiating device for the group.	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
	2.27.3.2.5	6) When designated-attendant operation is not in effect, elevators shall conform to 2.27.3.	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
	2.27.5.1	7) When operated by a designated attendant in the car, except hospital service:.....	.....
	2.27.5.2	a) Elevators parked at a floor shall conform to 2.27.3.1.6(h). At the completion of a time delay of not less than 10 s and not more than 30 s, elevators shall conform to 2.27.3.	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
		b) A moving car shall conform to 2.27.3.	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
	2.27.5.3	8) When on hospital service, the elevator shall conform to 2.27.3.1.6(h) while Phase I Emergency Recall Operation is in effect.	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
	9) An elevator on firefighter emergency operation shall not be placed on hospital service.	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	
2.27.6	10) Firefighters' Emergency Operation — Inspection Operation..... a) When an elevator that is provided with firefighters' service is on inspection operation (see 2.26.1.4 and 2.26.1.5) or when the hoistway access switch(es) have been enabled [see 2.12.7.3.3(a)], a continuous audible signal, audible at the location where the operation is activated shall sound when the "FIRE RECALL" switch(es) (see 2.27.3.1) is in the "ON" position or when the fire alarm initiating device (see 2.27.3.2) is activated to alert the operator of an emergency. b) The car shall remain under the control of the operator until removed from inspection operation or hoistway access operation. c) Inspection operation or hoistway access operation shall take precedence over Phase I Emergency Recall Operation and Phase II Emergency In-Car Operation.	..... <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	



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TESTING FIRE SERVICE (CONT)	A17.1 (A17.2)	COMMENTS	CARS 1-3
Fire Service Operation Panel	2.27.3.3.7	<p>1) The following switches and buttons shall be located in a panel with a locked cover located above the main COP:</p> <ul style="list-style-type: none"> <li>a) "FIRE OPERATION" switch (2.27.3.3),</li> <li>b) "CALL CANCEL" button [2.27.3.3.1(h)],</li> <li>c) "STOP" switch [2.27.3.3.1(m)],</li> <li>d) door open button(s),</li> <li>e) door close button(s),</li> <li>f) additional visual signal (2.27.3.3.8), and</li> <li>g) operating instructions shown in Fig. 2.27.7.2</li> </ul> <p>2) The panel cover:.....</p> <ul style="list-style-type: none"> <li>a) shall be openable by the same key that operates the "FIRE OPERATION" switch.</li> <li>b) shall be permitted to open automatically when the car is on Phase I Emergency Recall Operation and at the recall level.</li> <li>c) When the key is in the "FIRE OPERATION" switch, the cover shall not be capable of being closed.</li> <li>d) When closed, the cover shall be self-locking.</li> </ul> <p>3) Where rear doors are provided:.....</p> <ul style="list-style-type: none"> <li>a) buttons for both the front and rear doors shall be provided in the firefighters' operation panel.</li> <li>b) the door open and close buttons for the rear entrance shall be labeled "OPEN REAR" and "CLOSE REAR".</li> </ul> <p>4) All buttons and switches .....</p> <ul style="list-style-type: none"> <li>a) shall be readily accessible;</li> <li>b) located not more than 1 800 mm (72 in.) above the floor; and</li> <li>c) shall be arranged as shown in Fig. 2.27.3.3.7. Requirement 2.26.1.2 does not apply to these buttons and switches.</li> <li>d) the front of the cover shall contain the words "FIREFIGHTERS' OPERATION" in red letters at least 10 mm (0.4 in.) high.</li> </ul>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <hr/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> N/A <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <hr/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
Additional Visual Signal	2.27.3.3.8	<p>1) An additional visual signal shall be provided and located as required by 2.27.3.3.7.</p> <p>2) The additional visual signal shall be one of the symbols shown in Fig. 2.27.3.1.6(h).</p> <p>3) The entire circular or square area shown in Fig. 2.27.3.1.6(h) shall be illuminated.</p> <p>4) This additional visual signal shall be activated whenever the visual signal in 2.27.3.1.6(h) is activated.</p>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
See Fig. 2.27.3.1.6(h) below.			



GENERAL NOTE: Grid is for scaling purposes only.

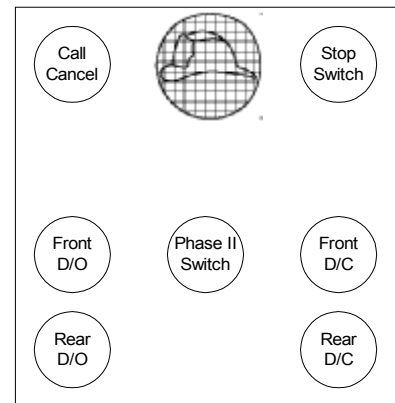


Fig. 2.27.3.3.7 Panel Layout

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Detector Location	Indicate Recall Landing		
	Car #1	Car #2	Car #3
1 <sup>st</sup> Landing			
2 <sup>nd</sup> Landing			
3 <sup>rd</sup> Landing			
4 <sup>th</sup> Landing			
5 <sup>th</sup> Landing			
6 <sup>th</sup> Landing			
7 <sup>th</sup> Landing			
Hoistway			
Machine Room			
<p><b>NFPA 72 (2002) National Fire Alarm Code (cont.)</b></p> <p><b>6.15.3.9</b> Actuation from elevator hoistway and elevator machine room smoke detectors or other automatic fire detection as permitted by 6.15.3.7 shall send an alarm condition on the building fire alarm system and shall visibly indicate, at the control unit and required annunciators, the alarm initiation circuit or zone from which the alarm originated.</p> <p><i>Exception: If approved by the authority having jurisdiction, the elevator hoistway and machine room smoke detectors shall be permitted to initiate a supervisory signal.</i></p> <p><b>6.15.3.10</b> For each group of elevators with a building, a minimum of three separate elevator control circuits shall be terminated at the designated elevator controller within the group's elevator machine room(s). The operation of the elevators shall be in accordance with Section 2.27 of ANSI/ASME A17.1 Safety Code for Elevators and Escalators. The smoke detectors or other automatic fire detection as permitted by 6.15.3.7 shall actuate the three elevator control circuits as follows:</p> <p>(1) The smoke detector or other automatic fire detection as permitted by 6.15.3.7 located in the designated elevator recall lobby shall actuate the first elevator control circuit. In addition, if the elevator is equipped with front and rear doors, or the elevator machine room is located at the designated level, the smoke detectors shall actuate the first elevator control circuit. The smoke detectors or other automatic fire detection as permitted by 6.15.3.7 in both lobbies at the designated level shall actuate the first elevator control circuit.</p> <p>(2) The smoke detectors or other automatic fire detection as permitted by 6.15.3.7 in the remaining elevator lobbies shall actuate the second elevator control circuit.</p> <p>(3) The smoke detectors or other automatic fire detection as permitted by 6.15.3.7 in the elevator hoistways and the elevator machine room(s) shall actuate the third elevator control circuit.</p>			
<p><b>6.15.4 Elevator Shutdown</b></p> <p><b>6.15.4.1</b> Where heat detectors are used to shut down elevator power prior to sprinkler operation, the detector shall have both a lower temperature rating and a higher sensitivity as compared to the sprinkler.</p> <p><b>6.15.4.2</b> If heat detectors are used to shut down elevator power prior to sprinkler operation, they shall be placed within 610 mm (2 ft) of each sprinkler head and be installed in accordance with the requirements of Chapter 5. Alternatively, engineering methods, such as specified in Annex B, shall be permitted to be used to select and place heat detectors to ensure response prior to any sprinkler head operation under a variety of fire growth rate scenarios.</p> <p><b>6.15.4.3</b> If pressure or waterflow switches are used to shut down elevator power immediately upon or prior to the discharge of water from sprinklers, the use of devices with time delay switches or time delay capability shall not be permitted.</p> <p><b>6.15.4.4</b> Control circuits to shut down elevator power shall be monitored for presence of operating voltage. Loss of voltage to the control circuit for the disconnecting means shall cause a supervisory signal to be indicated at the control unit and required remote annunciators.</p> <p><b>6.15.4.5</b> The initiating devices described in 6.15.4.2 and 6.15.4.3 shall be monitored for integrity by the control unit required in 6.15.3.1 and 6.15.3.2.</p>			

