

AMENDATORY SECTION (Amending WSR 04-12-047, filed 5/28/04, effective 6/30/04)

WAC 296-96-00500 Scope, purpose, and authority. This chapter is authorized by chapter 70.87 RCW covering elevators, lifting devices, moving walks, and other conveyances. The purpose of this chapter is to:

(1) Provide for the safe design, installation, mechanical and electrical operation, maintenance, examinations, safety tests and inspection of conveyances, and the performance of conveyance work((+)).

(2) Ensure that all such operation, design inspection, and conveyance work subject to the provisions of this chapter will be reasonably safe to persons and property and in conformity with the provisions of this chapter and the applicable statutes of the state of Washington.

(3) Establish and ensure compliance with the minimum standards for becoming a licensed elevator contractor and/or licensed elevator mechanic performing work on elevators or other conveyances covered by chapter 70.87 RCW and this chapter.

(4) In any case where the national standards codes adopted by reference in chapter 296-96 WAC conflict with the requirements of national standards adopted, this chapter supersedes.

(5) When no applicable standard exists to address subsections (1), (2), and (3) of this section the department will issue a ruling or interpretation that outlines the intent of this chapter.

AMENDATORY SECTION (Amending WSR 04-12-047, filed 5/28/04, effective 6/30/04)

WAC 296-96-00600 What rules apply to your conveyance? Elevators and other conveyances must comply with the rules adopted by the department that were in effect at the time the conveyance was permitted, regardless of whether the rule(s) has been repealed, unless any new rule specifically states that it applies to all conveyances, regardless of when the conveyance was permitted. Copies of previous rules adopted by the department are available upon request.

Please note, if the conveyance is altered the components associated with the alteration must comply with all of the applicable rules adopted by the department in effect at the time the conveyance (~~was altered~~) alteration was permitted. If the department determines that a conveyance was altered without a permit and inspection, the alteration will be required to comply with the applicable rules adopted by the department at the time the noncompliant alteration was identified.

AMENDATORY SECTION (Amending WSR 08-23-085, filed 11/18/08, effective 12/19/08)

WAC 296-96-00650 Which National Elevator Codes and Supplements has the department adopted?

NATIONAL ELEVATOR CODES AND SUPPLEMENTS ADOPTED				
TYPE OF CONVEYANCE	NATIONAL CODE AND SUPPLEMENTS	DATE INSTALLED		COMMENTS
		FROM	TO	
Elevators, Dumbwaiters, Escalators	American Standard Safety Code (ASA) A17.1, 1962	11/1/1963	12/29/1967	Adopted Standard
Moving Walks	American Safety Association A17.1.13, 1962	11/1/1963	12/29/1967	Adopted Standard
Elevators, Dumbwaiters, Escalators, and Moving Walks	U.S.A. Standards (USAS) USAS A17.1, 1965; Supplements A17.1a, 1967; A17.1b, 1968; A17.1c, 1969;	12/30/1967	2/24/1972	Adopted Standard USAS 1965 includes revision and consolidation of A17.1-1, 1960, A17.1a, 1963, and A17.1-13, 1962. Adopted code and supplements, excluding Appendix E and ANSI 17.1d, 1970.
Elevators, Dumbwaiters, Escalators, and Moving Walks	American National Standard Institute ANSI A17.1, 1971	2/25/1972	6/30/1982	Adopted Standard as amended and revised through 1971.
Elevators, Dumbwaiters, Escalators, and Moving Walks	ANSI A17.1, 1971; A17.1a, 1972	2/25/1972	6/30/1982	Adopted Supplement
Elevators, Dumbwaiters, Escalators, and Moving Walks	ANSI A17.1, 1981	7/1/1982	1/9/1986	Adopted Standard
Elevators, Dumbwaiters, Escalators, and Moving Walks	ANSI A17.1a, 1982	3/1/1984	1/9/1986	Adopted Supplement
Elevators, Dumbwaiters, Escalators, and Moving Walks	ANSI A17.1b, 1983	12/1/1984	1/9/1986	Adopted Supplement, except portable escalators covered by Part VIII of A17.1b, 1983.
Elevators, Dumbwaiters, Escalators, and Moving Walks	ANSI A17.1, 1984	1/10/1986	12/31/1988	Adopted Standard Except Part XIX. After 11/1/1988 Part II, Rule 211.3b was replaced by WAC 296-81-275.
Elevators, Dumbwaiters, Escalators, and Moving Walks	ANSI A17.1a, 1985	1/10/1986	12/31/1988	Adopted Supplement
Elevators, Dumbwaiters, Escalators, and Moving Walks	ANSI A17.1b, 1985; A17.1c, 1986; A17.1d, 1986; and A17.1e, 1987	12/6/1987	12/31/1988	Adopted Supplement
Elevators, Dumbwaiters, Escalators, and Moving Walks	ANSI A17.1, 1987	1/1/1989	12/31/1992	Adopted Standard Except Part XIX and Part II, Rule 211.3b. WAC 296-81-275 replaced Part II, Rule 211.3b.
Elevators, Dumbwaiters, Escalators, and Moving Walks	ASME A17.1, 1990	1/1/1993	2/28/1995	Adopted Standard Except Part XIX and Part V, Section 513. Chapter 296-94 WAC replaced Part V, Section 513.
Elevators, Dumbwaiters, Escalators, and Moving Walks	ASME A17.1, 1993	3/1/1995	6/30/1998	Adopted Standard Except Part XIX and Part V, Section 513. Chapter 296-94 WAC replaced Part V, Section 513.
Elevators, Dumbwaiters, Escalators, and Moving Walks	ASME A17.1, 1996	6/30/1998	6/30/2004	Adopted Standard Except Part V, Section 513.
Elevators, Dumbwaiters, Escalators, and Moving Walks	ASME A17.1, 2000; A17.1a, 2002; A17.1b, 2003	7/1/2004	1/1/2008	Adopted Standards and Addenda Except Rules 2.4.12.2, 8.6.5.8 and Sections 5.4, 7.4, 7.5, 7.6, 7.9, 7.10, 8.10.1.1.3 and 8.11.1.1.
Safety Standards for Platform Lifts and Stairway Chairlifts	ASME A18.1, 1999; A18.1a, 2001; A18.1b, 2001	7/1/2004	1/1/2008	Adopted Standards and Addenda.
Safety Code for Elevators, Escalators, Dumbwaiters, Residential Elevators, Special Purpose	ASME A17.1-2004; A17.1a-2005	1/1/2008	((Current)) <u>1/1/2014</u>	Adopted Standards and Addenda Except Rules ((2.4.12.2)) 2.4.7.2, marked car top clearance space, 8.6.5.8, Maintenance of safety bulkhead, 5.4, Private residence incline elevators, 7.4 & 7.5 & 7.9 & 7.10 Material lifts, 8.10.1.1.3 and 8.11.1.1, QEI-1 inspector.
Safety Code for Platform Lifts and Stairway Chairlifts	ASME A18.1-2005	1/1/2008	((Current)) <u>1/1/2014</u>	
Safety Code for Belt Manlifts	ASME A90.1-2003	1/1/2008	((Current)) <u>1/1/2014</u>	
Safety Code for Personnel Hoists, Retroactive	ANSI A10.4-2004	1/1/2008	((Current)) <u>1/1/2014</u>	

NATIONAL ELEVATOR CODES AND SUPPLEMENTS ADOPTED				
TYPE OF CONVEYANCE	NATIONAL CODE AND SUPPLEMENTS	DATE INSTALLED		COMMENTS
		FROM	TO	
Safety Code for Elevators, Escalators, Dumbwaiters, Residential Elevators, Special Purpose	ASME A17.1-2010	1/1/2014	Current	
Standard for Elevator Suspension, Compensation, and Governor Systems	ASME A17.6-2010	1/1/2014	Current	
Safety Code for Platform Lifts and Stairway Chairlifts	ASME A18.1-2011	1/1/2014	Current	
Safety Code for Belt Manlifts Safety	ASME A90.1-2009	1/1/2014	Current	
Safety Code for Personnel Hoists	ANSI A10.4-2007	1/1/2014	Current	

Note: Copies of codes and supplements can be obtained from The American Society of Mechanical Engineers, Order Department, 22 Law Drive, Box 2900, Fairfield, New Jersey, 07007-2900 or by visiting www.asme.org.

Comments: National codes adopted by this chapter will be identified with the applicable ASME/ANSI code reference number contained within the rules or as excluded or amended below.

(1) Exclude all references to QEI certification in ASME A17.1 from code adoption.

(2) Exclude all references and sections to Aramid fiber ropes in ASME A17.1 and A17.6 from code adoption.

(3) ASME A17.1, SECTION 1.2 PURPOSE AND EXCEPTIONS amended as follows:

The purpose of this code is to provide for the safety of life and limb, and to promote the public welfare. Compliance with this code shall be achieved by:

(a) Conformance with the requirements in ASME A17.1/CSA B44 and chapter 296-96 WAC. Additions or modifications to ASME A17.1/CSA B44 and/or chapter 296-96 WAC shall require approval from the department; or

(b) Conformance with a combination of the requirements in ASME A17.1/CSA B44, chapter 296-96 WAC, and ASME A17.7/CSA B44.7 with the following ASME A17.7 inclusions:

(i) All system or component certifications performed by an accredited elevator/escalator certification organization (AECO) under ASME A17.7/CSA B44.7, shall be approved by the department before any such system or component is allowed to be permitted or installed in the state of Washington. The applicant must submit all code documentation required by ASME A17.7 Section 2.10 and any other documentation as may be requested.

(ii) Sections of chapter 296-96 WAC that have taken exception to, made additions to, or modifications to ASME A17.1/CSA B44, such exceptions, additions and modifications shall supersede corresponding requirements in ASME A17.7/CSA B44.7.

(iii) The department has the final authority regarding acceptance of any item in ASME A17.7. The department may remove approval if a design has changed or unforeseen or undisclosed information is obtained.

(iv) The department will post the specific ASME A17.7 AECO certificate including exceptions agreed upon. At that time the certificate and exceptions become part of the adopted rule in the state of Washington and not subject to a variance process. The installer shall post the certificate and exceptions including all required information on each conveyance installed utilizing the ASME A17.7 method.

(v) The department may charge an additional fee for each item in review based upon the variance fee table.

(4) MARINE ELEVATOR SECTION 5.8

This chapter only applies to elevators installed on board a marine vessel flying the Washington state flag and under one hundred gross metric tons.

(5) Exclude ASME A17.1-2.4.7.2 reference for clearance reduction.

(6) Exclude ASME A17.1-5.4 private residence incline elevators and ASME A17.1-7.4, 7.5, 7.6, 7.9, and 7.10 material lifts and their corresponding 8.10.1.1.3.

(7) Exclude ASME A17.1-2.14.1.5.2 on elevators in partially enclosed hoistways. A top emergency exit shall be required.

AMENDATORY SECTION (Amending WSR 07-24-041, filed 11/30/07, effective 1/1/08)

WAC 296-96-00700 Chapter definitions. The following definitions apply to this chapter (see RCW 70.87.010 for additional definitions necessary for use with this chapter):

"ANSI" means the American National Standard Institute.

"ASA" means the American Safety Association.

"ASME" means the American Society of Mechanical Engineers.

"Acceptable proof" refers to the documentation that must be provided to the department during the elevator contractor and mechanic license application and renewal process. Acceptable proof may include department-approved forms documenting years of experience, affidavits, letters from previous employers, declarations of experience, education credits, copies of contractor registration information, etc. Additional documentation may be requested by the department to verify the information provided on the application.

"Code" refers to nationally accepted codes (i.e., ASME, ANSI, ASA, and NEC) and the Washington Administrative Code.

"Control room" refers to an enclosed control space outside the hoistway of the elevator or dumbwaiter, intended for full bodily entry that contains the motor and motion controller. The room could also contain electrical and/or mechanical equipment used directly in connection with the elevator or dumbwaiter, but not the electric driving machine.

"Control space" refers to a space outside the hoistway of the elevator, intended to be accessed without full bodily entry, which contains the motor and motion controller. This space could also contain electrical and/or mechanical equipment used directly in connection with the elevator but not the electric driving machine or the hydraulic machine. A control space* is limited to elevators, dumbwaiters, special purpose, and material lifts. The space shall not share any location, area or room which is also accessible to the general public.

***Note:** A control space must be preapproved and is limited on a case-by-case basis and should not be considered a normal installation process.

"((Decommissioned)) Decommissioning conveyance" means ((an installation whose power feed lines have been disconnected and:

(a) A traction elevator, dumbwaiter, or material lift whose suspension ropes have been removed, whose car and counterweight rests at the bottom of the hoistway, and whose hoistway doors have been permanently barricaded or sealed in the closed position on the hoistway side;

(b) A hydraulic elevator, dumbwaiter, or material lift whose Car rests at the bottom of the hoistway, pressure piping has been disas-

sembled and a section removed from the premises, hoistway doors have been permanently barricaded or sealed in the closed position on the hoistway side, suspension ropes have been removed and counterweights, if provided, landed at the bottom of the hoistway; or

(c) ~~An escalator or moving walk whose entrances have been permanently barricaded~~) a group of tasks that must be accomplished in order to place the conveyance in a long-term out-of-service status.

"Elevator machine room" means an enclosed machinery room outside the hoistway, intended for full bodily entry that contains the electric driving machine or the hydraulic machine and the motor controller. The room could also contain electrical and/or mechanical equipment used directly in connection with the elevator.

"Elevator machinery space" means a space inside or outside the hoistway, intended to be accessed with or without full bodily entry that contains elevator mechanical equipment and could also contain electrical equipment used directly in connection with the elevator. This space could also contain the electric driving machine.

"Examination" means a routine process or procedural task(s) or test(s) that ensure a conveyance and its systems and subsystems remain properly maintained and safe to operate.

"Final judgment" means any money that is owed the department as the result of an individual's or firm's unsuccessful appeal of a civil penalty. Final judgment also includes any penalties assessed against an individual or firm owed the department as a result of an unappealed civil penalty or any outstanding fees due under chapter 70.87 RCW and this chapter.

"General direction - Installation and alteration work" means the necessary education, assistance, and supervision provided by a licensed elevator mechanic (in the appropriate category) who is on the same job site as the helper/apprentice at least seventy-five percent of each working day. The ratio of helper to mechanic shall be one-to-one.

"General direction - Maintenance work" means the necessary education, assistance, and supervision provided by a licensed elevator mechanic (in the appropriate category) to ensure that the maintenance work is performed safely and to code.

"Layout drawings" or "plans" or "shop drawings" means engineering drawings that show required clearances and dimensions of elevator equipment in relation to building structure and shall include a machine room plan, hoistway plan, hoistway elevation, detail drawings, and general elevator data.

"Lockout" means the placement of a lockout device on an energy isolating device, in accordance with an established procedure, ensuring that the energy isolating device and the equipment being controlled cannot be operated until the lockout device is removed.

"Primary point of contact" is the designated individual employed by a licensed elevator contractor.

"Private residence elevator" (residential elevator) means a power passenger elevator which is limited in size, capacity, rise and speed and is installed in a private residence or multiple dwelling as a means of access to a private residence provided the elevators are so installed that they are not accessible to the general public or to other occupants in the building.

"Red tag" or "red tag status" means an elevator or other conveyance that has been removed from service and operation because of non-compliance with chapter 70.87 RCW and this chapter or at the request of the owner.

~~(("Private residence elevator" (residential elevator) means a power passenger elevator which is limited in size, capacity, rise and speed and is installed in a private residence or multiple dwelling as a means of access to a private residence provided the elevators are so installed that they are not accessible to the general public or to other occupants in the building.))~~

"RCW" means the Revised Code of Washington.

"Tagout" means the placement of a tagout device on an energy isolating device, in accordance with an established procedure, to indicate that the energy isolating device and the equipment being controlled may not be operated until the tagout device is removed by the individual who established the tag or by a person designated by the chief elevator inspector.

"Traction elevator" means an elevator in which the friction between the hoist ropes and the machine sheave is used to move the elevator car.

"USAS" means the U.S.A. Standards.

"WAC" means the Washington Administrative Code.

AMENDATORY SECTION (Amending WSR 07-24-041, filed 11/30/07, effective 1/1/08)

WAC 296-96-00902 Are there exceptions from the elevator mechanic licensing requirements? Yes.

(1) Elevator mechanic licenses issued under chapter 70.87 RCW and this chapter are not required for:

(a) Individuals who install signal systems, fans, electric light fixtures, illuminated thresholds, finished cab flooring materials that are identical to existing materials and feed wires to the terminals on the elevator main line control provided that the individual does not require access to the pit, hoistway, or top of the car for the installation of these items.

(b) An owner or regularly employed employee of the owner performing only maintenance work of conveyances in accordance with RCW 70.87.270.

(2) Elevator mechanic licenses may not be required for certain types of incidental work that is performed on conveyances when the appropriate lockout and tagout procedures have been performed by a licensed elevator mechanic in the appropriate category. The department must be notified in writing and must approve the scope of work prior to it being performed.

(3) An elevator mechanic license in accordance with RCW 70.87.230, is not required when dismantling or removing a conveyance, as long as the building or structure as defined by its foundation outline is totally secure from public and unauthorized access, and:

(a) The entire building is completely demolished down to and including the foundation; or

(b) The entire building is returned to the basic supporting walls, floors, and roof.

Otherwise, the work is to be performed by a licensed elevator mechanic who works for a licensed elevator contractor.

AMENDATORY SECTION (Amending WSR 04-12-047, filed 5/28/04, effective 6/30/04)

WAC 296-96-00903 Are there exceptions from the elevator contractor licensing requirements? Yes. Elevator contractor licenses issued under chapter 70.87 RCW and this chapter are not required for:

(1) An owner or regularly employed employee of the owner performing only maintenance work of conveyances in accordance with RCW 70.87.270.

(2) A public agency that employs licensed elevator mechanics to perform maintenance.

(3) Demolition of a conveyance as outlined in RCW 70.87.230 and WAC 296-96-00902.

AMENDATORY SECTION (Amending WSR 07-24-041, filed 11/30/07, effective 1/1/08)

WAC 296-96-00904 What must you do to become and remain a licensed elevator contractor? (1) Obtain and maintain a valid specialty or general contractor registration under chapter 18.27 RCW to engage in the business of conveyance work.

(2) Complete and submit a department-approved application. As part of the application:

(a) Specify the employee who is the licensed elevator contractor's primary point of contact.

(b) The person representing the company, firm or company who is applying for the elevator contractor's license must:

(i) Provide acceptable proof to the department that shows that the person representing the company, firm, or company has five years of work experience in performing conveyance work as verified by current and previous state of Washington elevator contractor licenses to do business; or

(ii) Pass a written examination administered by the department on chapter 70.87 RCW and this chapter. (In the case of a firm or company, the exam will be administered to the designated primary point of contact.)

(iii) Failure to pass the examination will require the submittal of a new application.

(3) Pay the fees specified in WAC 296-96-00922.

(4) The department may deny application or renewal of a license under this section if the applicant owes outstanding final judgments to the department.

(5) If the primary point of contact identified in subsection (2) (a) of this section separates employment, his/her relationship or designation is terminated, or death of the designated individual occurs, the elevator contractor must, within ninety days, designate a new individual who has successfully completed the elevator contractor examination and inform the department of the change in writing or the elevator contractor license will be automatically suspended.

(6) ASME A17.1-8.11.1.7 Unique or product-specific procedures or methods. Where unique or product-specific procedures or methods are required to inspect or test equipment, such procedures or methods shall be:

(a) Provided by the manufacturer or installer or their license may be suspended.

(b) Available to owners for their use or used by their qualified service provider.

(c) Accessible on-site to elevator personnel (see also ASME A17.1-8.6.1.2.1(f)).

(7) ASME A17.1-8.6.1.2.1 A written maintenance control program shall be in place to maintain the equipment in compliance with the requirements of ASME A17.1-8.6 and this chapter.

All elevator companies and other approved maintenance providers (see RCW 70.87.270) who continuously demonstrate noncompliance with the maintenance, examination, testing, documentation, and performance of work outlined in ASME A17.1 and this chapter, specifically Part D, Section VI, shall:

(a) Be notified in writing by the department outlining the reason or reasons for noncompliance;

(b) Respond to the department inquiry within fifteen days;

(c) Outline a solution(s) agreeable to the department within thirty days;

(i) Otherwise the elevator company's license may be suspended until such a time as they can demonstrate compliance; and

(ii) Other approved maintenance providers shall cease maintenance, examination, and testing until such a time as they can demonstrate compliance. Continuous demonstrations of maintenance, examination, and testing noncompliance shall result in approval being revoked.

AMENDATORY SECTION (Amending WSR 07-24-041, filed 11/30/07, effective 1/1/08)

WAC 296-96-00906 What must you do to become a licensed elevator mechanic? (1) Qualify for licensing:

(a) For conveyance work covered by all categories identified in WAC 296-96-00910 except material lifts (05), residential conveyances (06), residential inclined elevators (07) and temporary licenses (09), the applicant must comply with the applicable mechanic licensing requirements as follows:

(i) Test.

(A) The applicant must provide acceptable proof to the department that shows the necessary combination of documented experience and education credits in the applicable license category (see WAC 296-96-00910) of not less than three years' work experience in the elevator industry performing conveyance work as verified by current and previous employers licensed to do business in this state or as an employee of a public agency; and

(B) Pass an examination administered by the department on chapter 70.87 RCW and this chapter((-)); or

(ii) National exam/education.

(A) Have obtained a certificate of completion and successfully passed the mechanic examination of a nationally recognized training program for the elevator industry such as the National Elevator Industry Educational Program or its equivalent; or

(B) Have obtained a certificate of completion of an apprenticeship program for an elevator mechanic, having standards substantially

equal to those of chapter 70.87 RCW and this chapter, and registered with the Washington state apprenticeship and training council under chapter 49.04 RCW((-)); or

(iii) Reciprocity. The applicant must provide acceptable proof to the department that shows that the applicant is holding a valid license from a state having entered into a reciprocal agreement with the department and having standards substantially equal to those of chapter 70.87 RCW and this chapter.

(b) For conveyance work performed on material lifts as identified in WAC 296-96-00910(5):

Test.

(i) The applicant and the licensed elevator contractor/employer must comply with the provisions of RCW 70.87.245; and

(ii) The applicant must pass an examination administered by the department on chapter 70.87 RCW and this chapter;

(c) For residential conveyance work covered by category (06) as identified in WAC 296-96-00910:

Test.

(i) The applicant must provide acceptable proof to the department that shows the necessary combination of documented experience and education credits in the applicable license category (see WAC 296-96-00910) of not less than two years' work experience in the elevator industry performing conveyance work as verified by current and previous employers licensed to do business in this state; and

(ii) Pass an examination administered by the department on chapter 70.87 RCW and this chapter.

(d) For residential inclined conveyance work covered by category (07) as identified in WAC 296-96-00910;

Test.

(i) The applicant must provide acceptable proof to the department that shows the necessary combination of documented experience and education credits in the applicable license category (see WAC 296-96-00910) of not less than one year's work experience in the elevator industry or not less than three years' documented experience and education credits in conveyance work as described in category (01) performing conveyance work as verified by current and previous employers licensed to do business in this state; and

(ii) Pass an examination administered by the department on chapter 70.87 RCW and this chapter.

(e) For temporary mechanic licenses as identified in WAC 296-96-00910 category (09) the applicant must provide acceptable proof from a licensed elevator contractor that attests that the temporary mechanic is certified as qualified and competent to perform work under chapter 70.87 RCW and this chapter.

(2) Complete and submit a department-approved application.

An applicant who is required to take an examination under the provisions of this section may not perform the duties of a licensed elevator mechanic until the applicant has been notified by the department that he/she has passed the examination.

(3) Pay the fees specified in WAC 296-96-00922.

(4) The department may deny application of a license under this section if the applicant owes outstanding final judgments to the department or does not meet the minimum criteria established in the elevator laws and rules.

NEW SECTION

WAC 296-96-00907 ASME A17.1-8.11.1.5 Making safety devices ineffective. No person shall at any time make any required safety device or electrical protective device ineffective, except where necessary during tests and inspections. Such devices must be restored to their normal operating condition in conformity with the applicable requirements prior to returning the equipment to service (see ASME A17.1-2.26.7). If a required safety device or electrical protective device is found ineffective during the course of normal operation the conveyance must be immediately taken out of service. If the authorized mechanic or elevator company is found responsible for disabling the device(s) and placing the conveyance back into service they may have their license suspended until they can demonstrate conformity to the chapter (examples include, but are not limited to: Safety circuit, door and gate, terminal slowdowns, door reopening devices, anti-egress devices, or over current protection devices).

AMENDATORY SECTION (Amending WSR 07-24-041, filed 11/30/07, effective 1/1/08)

WAC 296-96-00910 What are the elevator mechanic license categories? The following are the licensing categories for qualified elevator mechanics or temporary elevator mechanics:

(1) **Category (01):** A general elevator mechanic license encompasses mechanical and electrical operation, construction, installation, alteration, maintenance, inspection, relocation, decommission, and repair of all types of elevators and other conveyances in any location covered under chapter 70.87 RCW and this chapter.

(2) **Category (02):** This license is limited to the mechanical and electrical operation, construction, installation, alteration, maintenance, inspection, relocation, decommission, and repair of the following commercial and residential conveyances:

(a) Residential conveyances:

- (i) Wheelchair lifts;
- (ii) Dumbwaiters;
- (iii) Incline chairlifts; and
- (iv) Residential elevators;

(b) Commercial conveyances:

- (i) Wheelchair lifts;
- (ii) Dumbwaiters; and
- (iii) Incline chairlifts.

(3) **Category (03):** This license is limited to the mechanical and electrical operation, construction, installation, alteration, maintenance, inspection, relocation, decommission, and repair of the following conveyances in industrial sites and grain terminals:

- (a) Electric and hand powered manlifts;
- (b) Special purpose elevators; and
- (c) Belt manlifts.

(4) **Category (04):** This license is limited to the mechanical and electrical operation, construction, installation, alteration, maintenance, inspection, relocation, decommission, and repair of the following conveyances:

- (a) Temporary personnel hoists;
- (b) Temporary material hoists; and
- (c) Special purpose elevators.

(5) **Category (05):** This license is limited to the mechanical and electrical operation, construction, installation, alteration, maintenance, inspection, relocation, decommission, and repair of material lifts.

(6) **Category (06):**

(a) This license is limited to the mechanical and electrical operation, construction, installation, alteration, maintenance, inspection, relocation, decommission, and repair of the following conveyances:

- (i) Residential wheelchair lifts;
- (ii) Residential dumbwaiters; and
- (iii) Residential incline chairlifts.

(b) Work experience on conveyances in (a)(i), (ii), and (iii) of this subsection may not be all inclusively applied toward the category (02) license requirements.

Note: Maintenance work performed by the owner or at the direction of the owner is exempted from licensing requirements provided that the owner resides in the residence at which the conveyance is located and the conveyance is not accessible to the general public. Such exempt work does not count toward work experience for licensure.

(7) **Category (07):** This license is limited to the mechanical and electrical operation, construction, installation, alteration, maintenance, inspection, relocation, decommission, and repair of residential inclined elevators.

Note: Maintenance work performed by the owner or at the direction of the owner is exempted from licensing requirements provided that the owner resides in the residence at which the conveyance is located and the conveyance is not accessible to the general public. Such exempt work does not count toward work experience for licensure.

(8) **Category (08):** This license is limited to maintenance and nonalteration repair and replacement of all conveyances and is further limited to employees of public agencies to obtain and maintain the license. This work should not count towards other licenses.

(9) **Category (09):** This temporary license is limited to the mechanical and electrical operation, construction, installation, alteration, maintenance, inspection, relocation, decommission, and repair of conveyances. This license is limited to individuals that are certified as qualified and competent by licensed elevator contractors and have met the education and training requirements in the category of license for the work performed. See policy number 07-16-104. The individual must be an employee of the licensed elevator contractor. The contractor shall furnish acceptable proof of competency as the department may require. Each license must recite that it is valid for a period of thirty days from the date of issuance and for such particular elevators or geographical areas as the department may designate, and otherwise entitles the licensee to the rights and privileges of an elevator mechanic license issued under chapter 70.87 RCW and this chapter.

Note: See policy number ((07-04)) 07-16-104.

AMENDATORY SECTION (Amending WSR 04-12-047, filed 5/28/04, effective 6/30/04)

WAC 296-96-00912 How long is the elevator contractor, elevator mechanic, and temporary mechanics licensing period and what is required for renewal? (1) Elevator contractors.

(a) The renewal period is two years from the date of issuance.

(b) As part of the renewal process the elevator contractor must:

(i) Complete and submit a department-approved application.

(ii) Designate an employee as a primary point of contact.

(iii) Pay the fees specified in WAC 296-96-00922.

(2) Elevator mechanics (category 01-08).

(a) The renewal period is two years from the date of your birth-day. The initial license may be for a shorter period as follows. If your birth year is:

(i) In an even-numbered year, your certificate will expire on your birth date in the next even-numbered year.

(ii) In an odd-numbered year, your certificate will expire on your birth date in the next odd-numbered year.

(b) As part of the renewal process you must:

(i) Complete and submit a department-approved application.

(ii) Have attended an approved continuing education course and submitted a certificate of completion for the course. The course must consist of not less than eight hours of instruction that must have been attended and completed within one year immediately preceding any license renewal.

(iii) Pay the fees specified in WAC 296-96-00922.

(3) Temporary elevator mechanics (category 9). The renewal is limited to two consecutive months and further limited by no greater than six permits issued in a twelve-month period. The limitation may be extended at the discretion of the department. Examples include, but are not limited to, abnormally high rate of construction, natural disaster or work stoppage.

(a) The renewal period is thirty days from the date of issuance.

(b) As part of the renewal process you must:

(i) Complete and submit a department-approved application.

(ii) Pay the fees specified in WAC 296-96-00922.

(iii) Have seventy-five percent of both education and training hours to obtain a license (see education policy).

(4) The department may deny renewals of licenses under this section if the applicant owes outstanding final judgments to the department.

(5) Renewals will be considered timely when the renewal application is received on or prior to the expiration date of the license.

(6) Late renewal is for renewal applications received after the expiration date of the license but no later than ninety days after the expiration of the licenses. If the application is not received within ninety days from license expiration, the licensee must reapply and pass the competency examination.

(7) A mechanic licensed in the state of Washington may take a withdrawal if they are no longer working for a company licensed in the state or no longer performing work that requires a license. A mechanic holding a valid license that wishes to withdraw their license must submit their request, in writing, to the department of labor and industries elevator section prior to the license expiration date. To cancel a withdrawal request and be reinstated, the mechanic must submit their request in writing, reapply, complete the current continuing education, and pay the renewal licensing fee.

AMENDATORY SECTION (Amending WSR 07-24-041, filed 11/30/07, effective 1/1/08)

WAC 296-96-01000 What is the permit process for conveyances? (1) Prior to construction, alteration, or relocation of any conveyance, the licensed elevator contractor shall:

(a) Submit an installation application to the department. See WAC 296-96-01010 through 296-96-01025.

(b) (~~Plans must be submitted~~) Submit plans to (~~and approved by~~) the department for approval. See WAC 296-96-01030.

EXCEPTION: Most alterations will not require plans.

(c) Post an approved installation or alteration permit (~~from~~) issued by the department on the job site.

(i) The annual operating certificate is considered suspended once alteration work begins.

(ii) The certificate shall not be reinstated until the alteration work is approved by an inspector employed by the department.

(d) Obtain and pass an inspection prior to placing the conveyance in service. See WAC 296-96-01035.

(e) Abstain from working without a permit or releasing the conveyance for use without the department's written permission. Failure to comply is a violation of this chapter and may result in civil penalties (WAC 296-96-01070 (1)(a)).

(2) The owner must obtain and renew an annual operating certificate for each conveyance that they own, except for residential conveyances. See WAC 296-96-01065.

(3) After initial purchase and inspection, private residence conveyance(s) do not require an annual operating certificate. However, annual inspections may be conducted upon request. See WAC 296-96-01045 for the permit process.

NEW SECTION

WAC 296-96-01008 Decommissioning a conveyance. A licensed elevator mechanic working for a licensed elevator company must decommission the conveyance. If the elevator is the only one in the building and the owner/agent wants the conveyance decommissioned the owner/agent must obtain a letter of approval from the local building official.

Note: Decommissioning is not dismantling or removing the conveyance.

(1) A conveyance is considered to be in decommissioned status when:

(a) The power feed lines from the disconnect switch to the controller have been removed; and

(b) The traction elevator, dumbwaiter, or material lift suspension ropes have been removed, and if applicable, the counterweight rests at the bottom of the hoistway. The hoistway doors, except for the bottom landing, have been permanently barricaded or sealed in the closed position on the hoistway side; and

(c) A hydraulic elevator, dumbwaiter, or material lift car rests at the bottom of the hoistway; pressure piping has been disassembled and a section removed from the premises; hoistway doors except for the bottom landing have been permanently barricaded or sealed in the

closed position on the hoistway side; suspension ropes have been removed and counterweights, if provided, landed at the bottom of the hoistway; and

(d) The escalator or moving walk entrances have been permanently barricaded.

(2) After decommissioning work is complete:

(a) The elevator mechanic must contact the department to schedule an inspection;

(b) The department will perform an inspection and send the results and applicable fee to the conveyance owner;

(c) Upon inspection and approval by the department, annual inspections will no longer be required, until such time that the conveyance is returned to service.

(3) If returning the conveyance to service and prior to operating the conveyance, an acceptance inspection and temporary operating permit must be obtained. The conveyance acceptance inspection shall be performed to the code in effect from the date of its original installation or alteration.

AMENDATORY SECTION (Amending WSR 12-06-065, filed 3/6/12, effective 4/30/12)

WAC 296-96-01070 What are the civil (monetary) penalties for violating the conveyance permit and operation requirements of chapter 70.87 RCW and this chapter? (1) Any licensee, installer, owner or operator of a conveyance who violates a provision of chapter 70.87 RCW or this chapter shall be subject to the following civil penalties:

(a)	Operation of a conveyance without a permit <u>or</u> <u>written approval from the department:</u>	
	First violation.	\$171.20
	Second violation.	\$342.60
	Each additional violation.	\$500.00
(b)	Installation of a conveyance without a permit:	
	First violation.	\$171.20
	Second violation.	\$342.60
	Each additional violation.	\$500.00
(c)	Relocation of a conveyance without a permit:	
	First violation.	\$171.20
	Second violation.	\$342.60
	Each additional violation.	\$500.00
(d)	Alteration of a conveyance without a permit:	
	First violation.	\$171.20
	Second violation.	\$342.60
	Each additional violation.	\$500.00
(e)	(i) Operation of a conveyance for which the department has issued a red tag or has revoked or suspended an operating permit or operation of a decommissioned elevator.	\$500.00

- (ii) Removal of a red tag from a conveyance \$500.00
- (f) Failure to comply with a correction notice:
 - After 90 days. \$114.10
 - After 180 days. \$285.40
 - After 270 days. \$457.00
 - After 360 days. \$500.00
 - Each 30 days after 360 days. \$500.00
 Note: Penalties are cumulative
- (g) Failure to submit official written notification that all corrections have been completed:
 - After 90 days. \$114.10
 - After 180 days. \$285.40
 - After 270 days. \$457.00
 - After 360 days. \$500.00
 - Each 30 days after 360 days. \$500.00
 Note: Penalties are cumulative
- (h) Failure to notify the department of each accident to a person requiring the services of a physician or resulting in a disability exceeding one day may result in a \$500.00 penalty per day. The conveyance must be removed from service until the department authorizes the operation of the conveyance. This may require an inspection and the applicable fees will be applied. Failure to remove the conveyance from service may result in an additional \$500.00 penalty per day. \$500.00 Plus WAC 296-96-01057
- (i) Falsifying official written documentation submitted to the department. Each day is a separate violation. \$500.00

(2) A violation as described in subsection (1)(a), (b), (c), and (d) of this section will be a "second" or "additional" violation only if it occurs within one year of the first violation.

(3) The department must serve notice by certified mail to an installer, licensee, owner, or operator for a violation of chapter 70.87 RCW, or this chapter.

PART C - REGULATIONS FOR NEW AND ALTERED ELEVATORS AND LIFTING DEVICES

NOTE: The following rules set the minimum standard for all new installations and, where applicable, alterations.

NOTE: Part C is not intended to replace the current adopted standards outlined in WAC 296-96-00650. In conflicts between Part C and the adopted standards, Part C (~~will~~) shall take precedent.

NEW SECTION

WAC 296-96-02401 ASME A17.1-8.7.1 Alteration general requirements. Alterations or replacement of new equipment to existing hoistway, machine room and machine space must follow the current rules for new elevators as related to location of equipment, motor controllers, motion controllers, drives, transformers, and other equipment as amended by this chapter.

AMENDATORY SECTION (Amending WSR 07-24-041, filed 11/30/07, effective 1/1/08)

WAC 296-96-02405 What is the inspection and approval process for alterations? The following process must be followed when performing alterations:

(1) Obtain an alteration permit from the department prior to performing the alteration. The permit application must include detailed information on the scope of the alteration.

(2) Take the conveyance out-of-service and perform the alteration.

(3)((+a+)) If the conveyance requires an inspection prior to being returned to service (as identified on the alteration permit), you must contact the department to ((perform)) schedule an inspection at least seven days in advance and:

((+i+)) (a) A licensed mechanic must be present and if the conveyance passes the inspection, the conveyance may be placed back into service.

((+ii+)) (b) If the conveyance fails the inspection, the conveyance must remain out-of-service until the corrections are made, reinspection scheduled and approved by the department.

((+b+)) (4) If the conveyance is not required to be inspected prior to being returned to service, you must contact the department immediately to ((perform)) schedule an inspection within seven days and obtain written permission prior to returning the conveyance to service. A licensed mechanic must be present during the scheduled inspection and:

((+i+)) (a) If the conveyance passes the inspection, the conveyance may remain in service.

((+ii+)) (b) If the conveyance fails the inspection, the conveyance will be placed out-of-service until the corrections are made, reinspection scheduled and approved by the department.

AMENDATORY SECTION (Amending WSR 07-24-041, filed 11/30/07, effective 1/1/08)

WAC 296-96-02410 Are there additional work requirements when performing an alteration? For certain types of alterations additional work may be required as part of the alteration and prior to approval of the conveyance. These alterations include, but are not limited to:

(1) Replacements of controllers will require the following:

(a) Firefighter service requirements must be ~~((met))~~ in accordance with the most recent code adopted by the department and include ASME A17.1-8.7.2.27.4(a)(4)(a) when travel is five feet or more above or below the designated landing.

(b) Seismic requirements ~~((=))~~ for derailment and/or seismic switch as required~~((=))~~ must be met in accordance with the most recent code adopted by the department. In addition, the ~~((ear))~~ conveyance must operate according to ASME A17.1 seismic requirements.

(c) Lighting in the machine room and pit must comply with the most recent code adopted by the department.

(d) Electrical outlets in the machine room and pit must be of the ground fault interrupter type.

(2) Replacement of controllers and a car operating panel and/or hall fixtures:

(a) The requirements of subsection (1) of this section must be met.

(b) All panels and fixtures must meet the applicable (e.g., height, sound, Braille, etc.) requirements in accordance with this chapter.

(3) Replacement of door operators and/or door equipment: Any changes to these items require the installation of door restrictors.

(4) Hydraulic piping: Replacement or relocation of hydraulic piping including a control valve will require the installation of a rupture (overspeed) valve. Gaskets and seals are excluded from this requirement.

Note: The department may grant exceptions to the requirements identified in this section.

NEW SECTION

WAC 296-96-02411 ASME A17.1-8.7.2.13 Door reopening devices.

Where a reopening device for power-operated car doors or gates is altered, replaced or added, it is considered an alteration and the following requirements shall apply:

- (1) Requirement 2.13.4;
- (2) Requirement 2.13.5; and

(3) When firefighters' emergency operation is provided, door reopening devices and door closing on Phase I and Phase II shall comply with the requirements applicable at the time of installation of the firefighters' emergency operation.

NEW SECTION

WAC 296-96-02421 Layout drawings. Two sets of legible layout/plans must be submitted to the department, in addition to the layout criteria in ASME, include the following:

(1) A machine room plan identifying room dimensions, location of drive machine and motor controller, mainline disconnect, outlet, light switch, and door swing;

(2) A hoistway plan identifying hoistway and conveyance equipment dimensions and clearances, foot print of cab showing doors and inside

cab dimensions, and location and dimensions of hoistway and cab door or gates;

(3) A hoistway elevation section identifying elevation of the hoistway and conveyance equipment dimensions and clearances, location of rail brackets, pit ladder, pit light, light switch, pit stop switch, top of car clearances, and on MRLs the height to the equipment from the horizontal plane of the top of the car with the car positioned at the top landing; and

(4) Detail drawings identifying specific details of conveyance components: Rail bracket fastening, sill support and fastening, machine beams, entrance installation assembly, loads and reactions, and additional seismic requirements (when required by building code).

General conveyance data includes:

- (a) Conveyance type (model) and capacity;
- (b) Location number (within building);
- (c) Up/down full load speed;
- (d) Car enclosure (construction material);
- (e) Door type and manufacturer (single speed, two-speed, center opening, RH/LH opening);
- (f) Platform thickness;
- (g) Finish floor (tile, carpet);
- (h) Power unit/drive motor (manufacturer and HP);
- (i) Power requirements;
- (j) Equipment heat generation (BTU) (Items (k)-(o) are applicable to hydraulic);
- (k) Jack model;
- (l) Plunger O.D. (if telescoping O.D. of each section);
- (m) Plunger wall thickness;
- (n) Cylinder O.D.;
- (o) Cylinder wall thickness (items (p)-(u) are applicable to roped-hydraulic and electric);
- (p) Size and number of hoist ropes;
- (q) Roping type (1:1, 2:1, underslung);
- (r) Governor location;
- (s) Governor rope size and number;
- (t) Safety manufacture and type;
- (u) Emergency brake manufacture and type;
- (v) Care buffer type and stroke;
- (w) CWT buffer type, impact, and stroke; and
- (x) Top/bottom runby.

NEW SECTION

WAC 296-96-02451 When a control space is used in lieu of a machine room.

Note: For elevators, a control space may be approved on a limited case-by-case basis and should not be considered a normal installation process.

(1) The control space cannot be located where the entrance to the space is accessible to the public.

(2) The space must be designed to prevent full bodily entry with the door closed.

(3) The control space shall not open into:

- (a) Hazardous locations;

(b) The outside environment when exposed on any side, top or bottom; and

(c) A space that is not environmentally controlled to maintain the elevator within the manufacturer's recommended temperature and humidity levels.

(4) Barricaded control space must be free of areas containing piping conveying liquid, vapor, or gas.

(5) If metal access doors are used, proper electrical clearances must be provided per the National Electrical Code.

(6) The space must have full environmental control as required by a machine room.

(7) Barricades must be:

(a) Minimum depth equal to forty-eight inches from the controller cabinet door to barricade;

(b) Minimum width equal to thirty-two inches and shall be the full width of the access opening;

(c) Minimum height equal to six feet;

(d) Minimum material equal to nonconductive rating;

(e) Permanently affixed to the inside door or jamb as to not be removed from the space;

(f) Constructed to withstand a force of two hundred fifty pounds of pressure applied in any direction without deflecting more than one-half inch (may require a floor mount when attached only to the door to meet deflection requirements);

(g) Provided with signage, "if you leave this area, you must replace guards and close doors." The minimum height of lettering shall be one inch.

(8) The control space shall be fire rated equivalent to the International Building Code, chapter 30.

NEW SECTION

WAC 296-96-02452 Machines, beams and hitch supports must meet the following requirements. When the machine space is provided inside the hoistway:

(1) The machine and overhead sheaves cannot be located more than six feet six inches from the horizontal plane of the cartop.

(2) The cartop inspection shall not operate past the normal terminal stopping device.

Note: Where access is greater than six feet six inches (see WAC 296-96-23115).

AMENDATORY SECTION (Amending WSR 07-24-041, filed 11/30/07, effective 1/1/08)

WAC 296-96-02455 What is the minimum working space required in machine rooms/control rooms? (1) In machine rooms with equipment requiring maintenance and inspection, an eighteen-inch working space must be established.

(2) There must be a minimum of eighteen inches working space (other than the required controller panel clearances) on one of the four sides of the hydraulic tank.

(3) The requirements in subsections (1) and (2) of this section do not supersede NFPA 70.

(4) The side with the hydraulic outlet pipe is not considered usable working space.

AMENDATORY SECTION (Amending WSR 07-24-041, filed 11/30/07, effective 1/1/08)

WAC 296-96-02460 What are the requirements for electrical main line disconnects? (1) The main line disconnect switch(es) or circuit breaker must be located per NEC 620.51(c) and:

(a) Inside the machine room door on the lock jamb side of the machine room door ((and));

(b) Not more than twenty-four inches from the jamb to the operating handle; and ((it must))

(c) Be at a height ((of)) not less than thirty-six inches and not more than sixty-six inches above the finish floor as measured center-line to the disconnect handle.

(2) For multicar machine rooms the switches shall be grouped together as close as possible to that location.

(3) For machine rooms with double swing doors, the doors must swing out and the switch(es) must be on the wall adjacent to the hinge side of the active door panel.

(4) The switch(es) must be designed so that they may be locked out and tagged in the open position.

EXCEPTION: Special purpose and residential inclined elevators are exempt from this section.

NEW SECTION

WAC 296-96-02466 ASME A17.1-8.9 Code data plate location and material. (1) An individual data plate shall be provided and maintained for each unit (see 1.1.1). The data plate shall indicate:

(a) Code to be used for inspections and tests (see 8.10.1.2);

(b) Code and edition in effect at the time of installation; and

(c) Code in effect at the time of any alteration and indicate the applicable requirements of 8.7, including reference number.

(2) The data plate shall be of such material and construction that the letters and figures stamped, etched or cast to the face shall remain permanently and readily legible. The height of the letters and figures shall be not less than 3.2 millimeters (0.125 inches).

(3) All data plates shall be provided with either of the additional requirements listed in 8.9.3 (a) or (b).

NEW SECTION

WAC 296-96-02471 ASME A17.1-2.27.8 FEO-K1 Fire service keys. The key switches required by ASME A17.1-2.27.2 through 2.27.5 for all new and altered elevators in a building shall be operable by the FEO-K1

key. The keys shall be Group 3 Security (see ASME A17.1-8.1). A separate key shall be provided for each switch. This key shall be of a tubular, 7 pin, style 137 construction and shall have a bitting code of 6143521 starting at the tab sequences clockwise as viewed from the barrel end of the key. The key shall be coded "FEO-K1." The possession of the "FEO-K1" key shall be limited to elevator personnel, emergency personnel, elevator equipment manufacturers, and authorized personnel during checking of firefighters emergency operation.

Note: (ASME A17.1-2.27.8) Local fire or building authorities may specify the requirements for a uniform keyed lock box and its location to contain the necessary keys. Where required, a lock box, including its lock and other components, shall conform to the requirements of UL 1037 (see Part 9). These keys shall be kept on the premises in a location readily accessible to firefighters and emergency personnel, but not where they are available to the public.

NEW SECTION

WAC 296-96-02481 Sprinklers and shunt trip within in the city limits of Seattle. Within the city limits of Seattle application of water will be manually controlled and elevator shut down will be installed per the current code adopted by the city of Seattle elevator section.

NEW SECTION

WAC 296-96-02486 ASME A17.1-5.7.10.5 Special purpose elevator car doors or gates. Interlocks or a combination consisting of mechanical locks and electric contacts must be provided for all elevators having car doors. An electrical/mechanical interlock must be provided on car gates on elevators in unenclosed hoistways unless a safe means of self-evacuation is provided. Such means must be approved by the department.

AMENDATORY SECTION (Amending WSR 07-24-041, filed 11/30/07, effective 1/1/08)

WAC 296-96-02505 What is the minimum acceptable initial transfer time for an elevator door? 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 the following equation:

$$T = ((D - (1.5 \text{ ft/s})) / 1.5 \text{ ft}) \text{ or } T = D / (455 \text{ mm}) = 5 \text{ seconds minimum,}$$
 where T equals the total time in seconds and D equals the distance (in feet or millimeters) from the point in the lobby or corridor 60 inches (1525 mm) directly in front of the farthest call button controlling that car to the centerline of its hoistway door.

EXCEPTION: For car with in car lanterns, T shall be permitted to begin when the signal is visible from the point sixty inches directly in front of the furthest hall call button and the audible signal is sounded.

Elevator doors shall remain fully open in response to a car call for three seconds minimum.

EXCEPTION: Special purpose and residential elevators are exempt.

EXCEPTION: Limited use/limited application (LULA), special purpose, and residential elevators are exempt from this section.

WAC 296-96-02525 What is required for installation and operation of emergency communication systems? Every elevator must contain an emergency two-way communication system. The installation and operation of this emergency communication system must comply with the ASME A17.1 code in effect when the department issued the elevator's installation permit. In addition to the appropriate ASME A17.1 code, the following requirements apply:

(1) The communication device located in the elevator car must comply with the following:

(a) The maximum height of any operable part of the communication system is forty-eight inches above the floor.

(b) Raised symbols and letters must identify the communication system. These symbols and letters must be located adjacent to the communication device. The characters used must be:

(i) At least 5/8 inches but no more than two inches high;

(ii) Raised 1/32 inch;

(iii) Upper case;

(iv) Sans serif or simple serif type; and

(v) Accompanied by Grade 2 Braille.

(c) If the system is located in a closed compartment, opening the door to the compartment must:

(i) Require the use of only one hand without tight grasping, pinching, or twisting of the wrist; and

(ii) Require a maximum force of five pounds.

(d) The emergency communication system must not be based solely upon voice communication since voice-only systems are inaccessible to people with speech or hearing impairments. An indicator light must be visible when the telephone is activated. This nonverbal means must enable the message recipient to determine the elevator's location address and, when more than one elevator is installed, the elevator's number.

(e) The emergency communication system must use a line that is capable of communicating with and signaling to a person or service that can respond appropriately to the emergency at all times.

(2) A communication device (intercom), if required by ASME A17.1, must be installed in the lobby adjacent to the Phase I key switch. This device must be a two-way communication device used to communicate with individuals in the elevator.

(a) The height of any communication device(s) located in the lobby must be located between forty-eight and sixty inches above the floor.

(b) Additional communication device(s) may also be located in other parts of the building in addition to the one located in the lobby.

(c) ASME A17.1-2.27.1.1.6(a) The two way voice communication (intercom) within the building is not required to meet the telephone operability verification requirements if the connections are hardwired.

EXCEPTION: Elevators that have less than sixty feet of travel do not require an intercom.

(3) Subsections (1) and (2) of this section do not apply to special purpose elevators. However, residential and special purpose elevators must have a means of communication located inside the elevator cab. This communication device must be permanently installed and

available at all times. Cell phones and radios do not meet this requirement.

EXCEPTION: Residential inclined elevators are exempt from this section.

AMENDATORY SECTION (Amending WSR 07-24-041, filed 11/30/07, effective 1/1/08)

WAC 296-96-02530 What requirements apply to the size and location of car handrails? A handrail must provide coverage lengthwise at least ninety percent from wall to wall.

(1) A handrail must be installed on all car walls not used for normal exits. The handrails must be:

(a) Attached to the wall at a height of between thirty-two and thirty-five inches from the floor(~~(-)~~) to the top of the handrail;

(b) Attached to the wall with a 1-1/2 inch space between the wall and the rail;

(c) Constructed with the hand grip portion not less than 1-1/4 inches but not more than two inches wide;

(d) Constructed with a cross-section shape that is substantially oval or round;

(e) Constructed with smooth surfaces and no sharp corners. Approaching handrail ends on a blank wall in the interior corners of a car do not have to return to the wall. However, if the handrail is located on the closing door wall of a single-slide or two-speed entrance elevator and it projects an abrupt end towards people entering the car, the handrail end must return to the wall.

(2) Residential elevators must have at least one handrail. The handrail must be installed on a car wall not used for normal exits.

EXCEPTION: Special purpose elevators are exempt from this section.

AMENDATORY SECTION (Amending WSR 07-24-041, filed 11/30/07, effective 1/1/08)

WAC 296-96-02550 ASME A17.1-3.18.3.8.3 and ASME A17.1-8.7.3.23.1- What are the requirements for underground hydraulic elevator pipes, fittings, and cylinders? All newly installed underground pressure cylinders and pipes containing hydraulic elevator fluids shall be encased in an outer plastic containment.

(1) The plastic casing shall be constructed of polyethylene or polyvinyl chloride (PVC). The plastic pipe wall thickness must not be less than 0.125 inches (3.175 mm). The casing shall be capped at the bottom and all joints must be solvent or heat welded.

~~((2))~~ (a) The casing shall be sealed and dry around hydraulic pipe and cylinder to contain any leakage into the ground and to prevent electrolysis to the hydraulic pipe and the cylinder. Dry sand may be used to stabilize the hydraulic cylinder.

~~((3))~~ (b) A one-half inch pipe nipple with a one-way check valve shall be located between the casing and cylinder for monitoring purposes.

~~((4))~~ (c) Alternate methods must receive approval from the department prior to installation.

((+5)) (d) This rule shall apply to all conveyances with installation permits issued by the department on or after 01/01/1993.

(2) ASME A17.1-3.18.2.2 Plunger design. Plungers shall be made of steel and shall be designed and constructed in compliance with the applicable formula in ASME A17.1-8.2.8.1 for calculation of elastic stability, bending, and external pressure. Plungers subject to internal pressure shall also be designed and constructed in accordance with cylinder design formula in ASME A17.1-8.2.8.2.

NEW SECTION

WAC 296-96-02551 ASME A17.1-2.6 and ASME A17.1-8.7.2.6 Protection of spaces below hoistways. Shall meet the requirements in WAC 296-96-23140.

NEW SECTION

WAC 296-96-02552 Location of equipment in hoistway. (1) Motor controllers, motion controller, drive, hydraulic control valves, hydraulic reservoir (tank), and hydraulic pump motor shall not be located in the hoistway or pit.

(2) Elevator controls and machinery other than driving machines, hydraulic cylinder, piston, governor, and their components shall be located in a room dedicated exclusively to elevator equipment.

(3) Drive sheaves, deflector sheaves, machine parts and supports are permitted to project into the hoistway.

(4) Driving machines shall not be located in the pit.

NEW SECTION

WAC 296-96-02556 Minimum width, clearances, and access of pit ladders. (1) ASME A17.1-2.2.4.2.2 The ladder rungs, cleats, or steps shall be a minimum of four hundred millimeters (sixteen inches) wide. When obstructions are encountered, the width may be permitted to be decreased to less than four hundred millimeters (sixteen inches). The reduced width shall be as wide as the available space permits, but not less than two hundred twenty-five millimeters (twelve inches).

(2) ASME A17.1-2.2.4.2.4 A clear distance of not less than one hundred fifteen millimeters (four and one-half inches) from the centerline of the rungs, cleats, or steps to the nearest permanent object in back of the ladder shall be provided. A permanent object is to include pipes, wiring, duct, switches, etc., protruding from the pit wall or structure.

(3) All pits shall comply with ASME A17.1-2.2.4.5 and shall include:

ASME A17.1-2.2.4.5(f) Separate pit access doors shall not be located where a person, upon entering the pit, can be struck by any part

of the car or counterweight when either is on its fully compressed buffer.

(4) ASME A17.1-2.2.4.4 Pits shall be accessible only to elevator personnel. The owner or other authorized people may access the pit for retrieval, sump pump, drain, and 110VAC lighting service, only if they have been properly trained for pit access entry and a record of the training is kept on-site.

NEW SECTION

WAC 296-96-02557 Pit lighting and stop switch. (1) ASME A17.1-2.2.5.3 The light switch shall be so located as to be accessible from the pit access door on the ladder side and adjacent to the pit stop switch.

(2) ASME A17.1-2.2.6.2 In elevators where access to the pit is through the lowest landing hoistway door, a stop switch shall be located between thirty-six inches and forty-eight inches above the floor level of the landing, within reach from the access floor and adjacent to the pit ladder, if provided. When the pit exceeds one thousand seven hundred millimeters (sixty-seven inches) in depth, an additional stop switch is required adjacent to the pit ladder and approximately one thousand two hundred millimeters (forty-seven inches) above the pit floor.

NEW SECTION

WAC 296-96-02558 Pit equipment. (1) ASME A17.1-2.4.2 When oil buffers are used, the bottom runby shall be not less than one hundred fifty millimeters (six inches). Sections (a) and (b) from the ASME A17.1-2.4.2.1 code are not adopted.

(2) ASME A17.1-2.2.8 When working platform inspection operation is provided, according to ASME A17.1-2.7.5.3.6 in hoistways containing a single elevator:

(a) A pit access door is required; or

(b) Additional elevator personnel shall be present outside the hoistway when the pit inspection operation is in effect.

AMENDATORY SECTION (Amending WSR 08-23-085, filed 11/18/08, effective 12/19/08)

WAC 296-96-02560 What are the requirements for submersible pumps or sumps? (1) Sump pumps and drains are not required in most elevator pits. Sump holes must be installed and measure a minimum of eighteen inches by eighteen inches by eighteen inches. If drains or sump pumps are installed, they must not be directly connected to sewers and/or storm drains. P-traps and check valves are not allowed. All installations must meet the NEC and all plumbing codes. Drains meeting the above requirements may be installed in lieu of sump holes.

Sump hole covers must be designed to withstand a load of three hundred pounds per square foot.

(2) ASME A17.1-2.2.2.5 Elevators that are provided as fire service access elevators (one hundred twenty feet) or occupant evacuation elevators (four hundred feet) a drain or sump pump shall be provided. The sump pump or drain shall have the capacity to remove a minimum of three thousand gallons/hour per elevator and meet all requirements in ASME A17.1, ICC and this chapter.

EXEMPTION: Residential elevators, vertical platform lifts, and special purpose lifts are exempt from this section.

NEW SECTION

WAC 296-96-02564 ASME A17.1-2.4.12.1-2005 Distance required for car top refuge space. An unobstructed horizontal area of not less than half meters² (5.4 feet²) shall be provided on top of the car enclosure for refuge space. It shall measure not less than six hundred millimeters (twenty-four inches) on any side. This area shall be permitted to include the space utilized for the top emergency exit (see ASME A17.1-2.14.1.5.1(f)). The minimum vertical distance in the refuge area between the top of the car enclosure and the overhead structure or other obstruction shall be not less than one thousand one hundred millimeters (forty-three inches) when the car has reached its maximum upward movement.

NEW SECTION

WAC 296-96-02566 ASME A17.1-2.14.7.1.4 Requirements for top of car lighting and receptacle for elevators. Each elevator shall be provided with lighting and a duplex receptacle fixture on the car top.

(1) The lighting shall be permanently connected and fixed to provide an illumination level of not less than one hundred lux (ten foot candle) measured:

(a) At the point of any elevator part or equipment, where maintenance or inspection is to be performed from the car top; and

(b) Across the entire horizontal plane of the top of the car up to a minimum height of six feet.

(2) All lighting fixture(s) shall be equipped with guards and protected from accidental breakage.

(3) The light switch shall be accessible from the landing when accessing the car top.

(4) Where the access to machinery space is from the top of the car the cartop receptacle may be used.

EXCEPTION: Residential elevator, special purpose installed without lighting.

NEW SECTION

WAC 296-96-02567 ASME A17.1-2.7.6.3.4 Access to governors and brake. (1) For governors that are located in the hoistway, governor access from outside the hoistway is required unless:

- (a) The governor is manually reset from the controller;
- (b) The governor switches are manually reset from the controller;
- (c) A means is available for tripping the governor by either a switch or key from the controller or control room;
- (d) A permanent means from the controller or control room is provided that shows the car direction and speed, plus the governor tripping speed;

(e) A means of servicing and inspecting the governor can be performed from inside the hoistway;

(f) Access to the governor is via the cartop working platform or per WAC 296-96-23115; and

(g) Access is safe, convenient and within easy reach for inspection, maintenance and testing purposes and not from the adjacent car.

(2) If governor or brake access is required from outside the hoistway the access panel must:

(a) Be a minimum of twelve inches by twelve inches and a maximum of twenty-four inches by twenty-four inches;

(i) Access openings in a residential hoistway enclosure where full bodily entry is not necessary for rescue operation, maintenance and inspection of components shall be a minimum of ninety-six square inches with a minimum of eight inches on one side and have a maximum width and height of twenty-four by twenty-four inches.

(ii) ASME A17.1-5.3.1.7.7 Where direct observation of the drive machine, suspension means, or brake is not possible from the access opening, a means conforming to the requirements of ASME A17.1-2.7.6.4 shall be provided.

(b) Self-closing and self-locking, security level key outlined in ASME A17.1-8.1 with key in key box (exempt residential for key box);

(c) If located more than sixty inches above the floor provide a work platform that provides safe and convenient access to the panel (exempt residential);

(d) Meet the fire rated requirement of the hoistway;

(e) Cannot be located above the hoistway if a fall hazard into the hoistway is created by the access panel; and

(f) Access must be safe, convenient and within easy reach for inspection, maintenance, and testing procedures.

NEW SECTION

WAC 296-96-02568 ASME A17.1-5.3.1.1 Residential hoistway enclosures. Residential hoistways shall be solidly enclosed throughout their height without grillwork or openings other than for landing or access doors. Enclosures shall be of sufficient strength to support in true alignment the hoistway doors, gates and their locking equipment. The fire resistance rating shall be in accordance with the requirements of the building code. Any exterior windows within the hoistway shall be protected by metal grillwork. Grillwork shall reject a ball

seventy-six millimeters (three inches) in diameter and shall be securely fastened from the inside of the hoistway.

Note: See ASME requirements for partially enclosed hoistways.

AMENDATORY SECTION (Amending WSR 07-24-041, filed 11/30/07, effective 1/1/08)

WAC 296-96-02580 Are keys required to be on-site? The keys to the machine room and the keys that are necessary to operate the elevator must be located in a locked key retainer box in the elevator lobby at the designated level above the hall buttons, or located by machine room doors at no more than six feet above the floor, provided access to the key box doesn't require passage through locked doors. If in order to meet this requirement the box would be located in an unsecured location (such as the outside portion of a condo), other arrangements shall be accommodated with the written permission of the department.

The key retainer box must be:

- Readily accessible to authorized personnel;
- Clearly labeled "ELEVATOR";
- Securely mounted;
- Equipped with a 1-inch mortise cylinder cam lock with keyway set to a #39504 Fort type key and securely mounted;

Further:

- Keys for access to elevator machine rooms and for operating elevator equipment must be tagged and kept in the key box.
- The box must contain all keys.
- Mechanical hoistway access devices must be located in the key box or machine room.

Note: The cities of Seattle and Spokane may designate their own options for keys and lockbox arrangement via their rule processes. ASME A17.1-2.27.8 Local fire or building code authorities may specify the requirements for a uniform keyed lock box and its location to contain the necessary keys (this will be in addition to the requirements above). Where required, a lock box, including its lock and other components, shall conform to the requirements of UL 1037 (see Part 9). These keys shall be kept on the premises in a location readily accessible to firefighters and emergency personnel, but not where they are available to the public.

EXCEPTION: Residential elevators are exempt from this section.

AMENDATORY SECTION (Amending WSR 07-24-041, filed 11/30/07, effective 1/1/08)

WAC 296-96-02595 What are the general requirements for LULA elevators? (1) LULAs may be permitted in churches, private clubs, and buildings listed on the historical register that are not required to comply with accessibility requirements.

~~(2) ((Installation of LULAs in existing buildings that are not required to comply with accessibility requirements will be considered on a case-by-case basis by the department.~~

~~(3))~~ For LULAs installed according to subsection~~((s))~~ (1) ~~((and~~ ~~(2))~~) of this section a form provided by the department must be signed by the local building official.

~~((4))~~ (3) LULAs must be equipped with an emergency communication device meeting the requirements of WAC 296-96-02330.

(4) ASME A17.1-5.2.1.7.1 Elevator machine rooms, control rooms, and machinery spaces containing an elevator driving machine not loca-

ted in the hoistway shall have clear headroom of not less than two thousand one hundred thirty millimeters (eighty-four inches).

(5) All maintenance, examination, and safety tests must be in accordance with ASME A17.1-8.6 and WAC 296-96-23605(3).

AMENDATORY SECTION (Amending WSR 07-24-041, filed 11/30/07, effective 1/1/08)

WAC 296-96-02600 What is required for physically handicapped lifts? ~~((1) All inclined stairway chairlifts and inclined and vertical wheelchair lifts installed in buildings where the conveyance is not visible at all times must be equipped with a standard electric switch Chicago style lock and #2252 key.~~

~~(2) All inclined stairway chairlifts and inclined and vertical wheelchair lifts installed in residences licensed as group homes must be equipped with a standard electric key switch Chicago style lock and #2252 key.~~

~~(3) All inclined stairway chairlifts and inclined and vertical wheelchair lifts installed in schools, day care centers, churches and other facilities which typically accommodate or provide services for children must also be equipped with a standard electric key switch Chicago style lock and #2252 key.~~

~~(4) Where these conveyances are installed outdoors, they must be equipped with either a standard electric key switch Chicago style lock and #2252 key or a timing device. The timing device must not allow the conveyance to run outside of normal business hours.~~

~~(5) In locations where the conveyance is not visible at all times, the conveyance must be equipped with a means of two way communication that is capable of communicating with and signaling to a person or service that can respond appropriately at all times.~~

EXEMPTION: Inclined stairway chairlifts and inclined and vertical wheelchair lifts in private residences are not required to be equipped with key switches.

~~(6))~~ (1) Beginning July 1, 2004, vertical (~~wheelchair~~) platform lifts in commercial installations must be equipped with low energy power-operated doors or gates complying with ANSI/BHMA A156.19. Doors and gates shall remain open for twenty seconds minimum. End doors shall be thirty-two inches minimum clear width. Side doors shall be forty-two inches minimum clear width.

EXCEPTION: Lifts having doors or gates on opposite sides shall be permitted to have manual doors and gates.

~~((7))~~ (2) For purposes of ~~((this section))~~ two-way communication, "not visible at all times" includes, but is not limited to, conveyances located in stairwells, auditoriums, and other areas which are not generally in the normal path of travel during the hours that the building is occupied.

AMENDATORY SECTION (Amending WSR 07-24-041, filed 11/30/07, effective 1/1/08)

WAC 296-96-02605 ((Are)) Private residence inclined stairway chairlifts ((required to be permanently wired?)). (1) Private resi-

dence inclined stairway chairlifts are not required to be permanently wired into a structure. These conveyances may be equipped with a cord and plug. The plug must be directly inserted into a wall receptacle that is protected by a fuse or a circuit breaker at its source and is capable of supporting the additional load on the circuit. The source must be identified either at the receptacle or at the feeder panel. The cord must be secured in a manner that will not create any tripping hazards.

(2) ASME A18.1-7.10.1 Operation of the lift from the top and bottom landings and from the platform shall be controlled by control switches at all stations and by means of the continuous pressure type. Operation of the lift from the intermediate landings shall be controlled by "up" and "down" control switches and by means of the continuous pressure type. Controls shall be one thousand two hundred millimeters (forty-eight inches) maximum and nine hundred fourteen millimeters (thirty-six inches) minimum above the platform floor or facility floor or ground level. Operating devices shall be designed so that both the "up" and "down" circuits cannot be operated at the same time.

(3) A free passage width of not less than seventeen inches shall be provided. If the chair can be folded when not in use the distance can be measured from the folded chair. When in use there must be a minimum of two inches between any body part and the nearest obstruction.

NEW SECTION

WAC 296-96-02620 Private residence vertical platform lifts. (1) ASME A18.1-5.10.1 Operation of the lift from the top and bottom landings and from the platform shall be controlled by control switches at all stations and by means of the continuous pressure type. Operation of the lift from the intermediate landings shall be controlled by "up" and "down" control switches and by means of the continuous pressure type. Controls shall be one thousand two hundred millimeters (forty-eight inches) maximum and nine hundred fourteen millimeters (thirty-six inches) minimum above the platform floor or facility floor or ground level. Operating devices shall be designed so that both the "up" and "down" circuits cannot be operated at the same time.

(2) NEC 20.51(A) Disconnecting means and controls. Cord and plug connection will be allowed under the following conditions:

(a) The main power source must be from a battery system that is receiving its charge from a cord and plug connected AC battery charger connected to an individual branch circuit;

(b) The circuit supplying the battery charger must be protected by a ground fault circuit protector (GFCI breaker);

(c) The receptacle used to connect to the battery charger must have a cover that meets the requirements of the National Electric Code (NEC) 406.8(b);

(d) The cord must be:

(i) Hard service rated;

(ii) Listed by an electrical testing laboratory approved by the department of labor and industries electrical program;

(iii) In compliance with the requirements of the NEC 400; and

(iv) Properly secured at least every twenty inches, without presenting a tripping hazard, and be limited to twelve feet in length from the battery charger.

(e) A sign must be posted at both the AC and DC source of power disconnecting means that states "warning - parts of the control panel are not de-energized by this switch"; and

(f) The DC source of power must have a disconnect located on the exterior and within site of the lift, be lockable, identified by the available voltage, and labeled per NEC 110.22.

NEW SECTION

WAC 296-96-02625 Private residence incline platform lifts. ASME A18.1-6.10.1 Operation of the lift from the top and bottom landings and from the platform shall be controlled by control switches at all stations and by means of the continuous pressure type. Operation of the lift from the intermediate landings shall be controlled by "up" and "down" control switches and by means of continuous pressure type. Controls shall be one thousand two hundred millimeters (forty-eight inches) maximum and nine hundred fourteen millimeters (thirty-six inches) minimum above the platform floor, facility floor, or ground level. Operating devices shall be designed so that both the "up" and "down" circuits cannot be operated at the same time.

NEW SECTION

WAC 296-96-02630 Commercial vertical and incline platform lifts. (1) ASME A18.1-2.10.1 and ASME A18.1-3.10.1 Operation of the lift from the top and bottom landing(s) and from the platform shall be controlled by control switches at all stations and by means of the continuous pressure type. Operation of the lift from the intermediate landing(s) shall be controlled by "up" and "down" control switches and by means of the continuous pressure type. Controls shall be one thousand two hundred millimeters (forty-eight inches) maximum and nine hundred fourteen millimeters (thirty-six inches) minimum above the platform floor, facility floor, or ground level. Operating devices shall be designed so that both the "up" and "down" circuits cannot be operated at the same time.

(2) ASME A18.1-4.1.1 Incline commercial platform lifts in new and existing buildings must have a clear passage width of not less than twenty inches. If the platform can be folded when not in use, the distance shall be measured from the folded position to the nearest obstruction.

NEW SECTION

WAC 296-96-02640 Incline commercial stairway chair lifts. (1) ASME A18.1-2.10.1 and ASME A18.1-3.10.1 Operation of the lift from the

top and bottom landing(s) and from the platform shall be controlled by control switches at all stations and by means of the continuous pressure type. Operation of the lift from the intermediate landing(s) shall be controlled by "up" and "down" control switches and by means of the continuous pressure type. Controls shall be one thousand two hundred millimeters (forty-eight inches) maximum and nine hundred fourteen millimeters (thirty-six inches) minimum above the platform floor, facility floor, or ground level. Operating devices shall be designed so that both the "up" and "down" circuits cannot be operated at the same time.

(2) ASME A18.1-4.1.1 Incline commercial stairway chair lifts in new and existing buildings must have a clear passage width of not less than twenty inches. If the seat can be folded when not in use, the distance shall be measured from the folded position to the nearest obstruction.

PART C1 - MINIMUM STANDARDS FOR ((ALL)) NEW AND ALTERED MATERIAL LIFTS

NEW SECTION

WAC 296-96-05009 What are the requirements for existing material lifts? Material lifts must comply with the rules adopted by the department that were in effect at the time the conveyance was permitted, regardless of whether the rule(s) has been repealed, unless any new rule specifically states that it applies to all conveyances regardless of when the conveyance was permitted. Copies of previous rules adopted by the department are available upon request.

If the department determines that a material lift was installed without a permit and/or without an inspection, the conveyance will be required to comply with the current rules adopted by the department.

AMENDATORY SECTION (Amending WSR 04-12-047, filed 5/28/04, effective 6/30/04)

WAC 296-96-05070 What car enclosure requirements apply to lifts?

(1) Lift cars must have their sides enclosed with solid panels or openwork that will reject a ((2)) two-inch diameter ball. On the car sides where there is no gate (door), the enclosure must extend to a height of at least ((48)) forty-eight inches from the floor or to a height necessary to enclose the materials that are being moved, whichever is greater. On the car side next to the counterweight runway, the enclosure must extend vertically to the car top or underside of the car crosshead and horizontally to at least ((6)) six inches on each side of the runway.

(2) Material lifts in unenclosed hoistways must have a car gate that is constructed of the same material as the car enclosure.

(3) The gate, if required or supplied, must be the same height as the sidewalls of the car enclosure and must be provided with a latch-

ing device and electrical contact to prevent the operation of the motor and brake if open more than two inches.

AMENDATORY SECTION (Amending WSR 01-02-026, filed 12/22/00, effective 1/22/01)

WAC 296-96-05080 How much running clearance is permitted between a car sill and a hoistway? Running clearance between a car sill and a hoistway enclosure must not exceed ~~((2))~~ two inches. If the lift is supplied with a car door or gate, the running clearance is measured from the car sill to the hoistway sill.

AMENDATORY SECTION (Amending WSR 07-24-041, filed 11/30/07, effective 1/1/08)

WAC 296-96-05140 What requirements apply to car safeties? Car safeties must be used on all material lifts that are suspended by wire ropes or chains. They must be able to stop and sustain a car carrying ~~((125))~~ one hundred twenty-five percent of its rated load. This shall be demonstrated during the acceptance inspection and test procedure with a free-fall drop, minimum two safeties at a time (in cases of four post safeties). On lifts driven by rack and pinion machines:

(1) Car safeties must be able to stop and sustain a car carrying one hundred twenty-five percent of its rated load.

(2) Car safeties will consist of a freely rotating safety pinion, an overspeed governor and a safety device which may be mounted on the car.

~~((2))~~ (3) The rotating pinion driving an overspeed governor will travel on a stationary rack which is vertically mounted in the hoistway.

~~((3))~~ (4) The governor will actuate the safety device when the downward speed of the car reaches the tripping speed and will bring the car to a gradual stop.

~~((4) Car safeties must be able to stop and sustain a car carrying one hundred twenty five percent of its rated load.)~~

AMENDATORY SECTION (Amending WSR 01-02-026, filed 12/22/00, effective 1/22/01)

WAC 296-96-05240 What are the minimum maintenance requirements for lifts? All owners, or designated owner representatives, of material lifts described in this chapter are responsible for the maintenance of their lifts and parts. Minimum maintenance requirements are:

(1) All lifts described in this chapter and their parts must be maintained in a safe condition. Maintenance, examinations, and safety tests are to be performed and documented to the applicable sections of WAC 296-96-23601 through 296-96-23610; and

(2) All devices and safeguards that are required by this chapter must be maintained in good working order.

AMENDATORY SECTION (Amending WSR 01-02-026, filed 12/22/00, effective 1/22/01)

WAC 296-96-07035 What are the minimum maintenance requirements for inclined private residence elevators? Owners of inclined private residence elevator are responsible for the following:

- (1) Maintaining elevators and mechanical parts in a safe condition; and
- (2) Ensuring that all devices and safeguards required by these regulations are maintained in good working order.

The department recommends maintenance, examinations, and safety tests be performed and documented to the applicable sections of WAC 296-96-23601 through 296-96-23610.

AMENDATORY SECTION (Amending WSR 01-02-026, filed 12/22/00, effective 1/22/01)

WAC 296-96-08035 What are the minimum maintenance requirements for inclined private residence elevators for transporting property? Owners of inclined private residence elevators for transporting property are responsible for ensuring that:

- (1) Elevators and their parts are maintained in a safe condition; ~~((and))~~
- (2) All devices and safeguards required by these regulations are maintained in good working order; and

(3) The department recommends maintenance, examinations, and safety tests be performed and documented to the applicable sections of WAC 296-96-23601 through 296-96-23610.

AMENDATORY SECTION (Amending WSR 07-24-041, filed 11/30/07, effective 1/1/08)

WAC 296-96-09001 What regulations apply to personnel hoists? All personnel hoist installations, maintenance, repair and tests must comply with the American National Standard Institute ANSI A10.4-~~((2004))~~ 2007 edition ~~((or the latest published edition adopted by ANSI,))~~ Safety Requirements for Personnel Hoists and Employee Elevators for Construction and Demolition Operations.

EXCEPTION: Lifts and hoists for persons and material that are erected temporarily for use during construction and maintenance work and are designed in one of the following ways:
(1) Powered platforms used for and temporarily constructed in conjunction with exterior work on building facades or to erect scaffolding, not intended to move personnel or material from one landing to another. Not intended to move personnel or materials into or out of a building or structure; and
(2) Portable self-propelled lifts used by workers.

AMENDATORY SECTION (Amending WSR 07-24-041, filed 11/30/07, effective 1/1/08)

WAC 296-96-10001 What regulations apply to material hoists? All material hoist installations, maintenance, repair, and tests must comply with the American National Standard Institute ANSI A10.5-1992 edition (~~or the latest published edition adopted by ANSI,~~) Safety Requirements for Material Hoists.

EXCEPTION: Lifts and hoists for material that are erected temporarily for use during construction work only and are designed in one of the following ways:
(1) Powered platforms used for and temporarily constructed in conjunction with exterior work on building facades or to erect scaffolding, not intended to move material from one landing to another; and
(2) Portable lifts for material only.

AMENDATORY SECTION (Amending WSR 07-24-041, filed 11/30/07, effective 1/1/08)

WAC 296-96-11001 What regulations apply to belt manlifts? WAC 296-96-11016 through 296-96-11080 apply to all existing belt manlifts. Belt manlifts installed between July 1, 2004, and January 1, 2008, must meet the requirements in ASME A90.1-1997.

Belt manlifts installed between January 1, 2008, and December 31, 2013, must meet the requirements in ASME A90.1-2009.

After the effective date of these rules all belt manlift installations and alterations must meet ASME A90.1-~~((2003))~~ 2009.

All belt manlifts must be maintained, inspected and tested to conform to section 8 and appendix II of ASME A90.1-~~((2003))~~ 2009.

Maintenance inspection report shall be kept in a secure location within the building the belt manlift serves.

NEW SECTION

WAC 296-96-13136 What are the minimum maintenance requirements for electric manlifts? Owners of electric manlifts are responsible for ensuring that:

- (1) Elevators and their parts are maintained in a safe condition;
- (2) All devices and safeguards required by these regulations are maintained in good working order; and
- (3) Maintenance, examinations, and safety tests be performed and documented to the applicable sections of WAC 296-96-23601 through 296-96-23610.

NEW SECTION

WAC 296-96-14011 What are the minimum maintenance requirements for hand powered manlifts? Owners of hand powered manlifts are responsible for ensuring that:

- (1) Elevators and their parts are maintained in safe condition;

(2) All devices and safeguards required by these regulations are maintained in good working order; and

(3) Maintenance, examinations and safety tests are performed and documented to the applicable sections of WAC 296-96-23601 through 296-96-23610.

NEW SECTION

WAC 296-96-16011 What are the minimum maintenance requirements for casket lifts? Owners of casket lifts are responsible for ensuring that:

(1) The lift and their parts are maintained in a safe condition; and

(2) All devices and safeguards required by these regulations are maintained in good working order.

AMENDATORY SECTION (Amending WSR 01-02-026, filed 12/22/00, effective 1/22/01)

WAC 296-96-16210 What specific requirements apply to hydraulic ((elevators)) casket lifts? (1) All hydraulic elevators must be a plunger type with the plunger securely attached to the car platform.

(2) Plungers composed of more than one section must have the joints designed and constructed to carry in tension the weight of all plunger sections below the joints.

(3) Plungers must be provided with solid metal stops to prevent the plunger from traveling beyond the limits of the cylinder. Stops must be designed and constructed so as to stop the plunger from maximum speed in the "up" direction under full pressure without damage to the hydraulic system.

(4) Any leaking hydraulic oil must be collected.

NEW SECTION

WAC 296-96-18011 What are the minimum maintenance requirements for boat launch elevators? Owners of boat launch elevators are responsible for ensuring that:

(1) Elevators and their parts are maintained in a safe condition; and

(2) All devices and safeguards required by these regulations are maintained in good working order.

NEW SECTION

WAC 296-96-20010 What are the minimum maintenance requirements for mechanized parking garage equipment? Owners of mechanized parking garage equipment are responsible for ensuring that:

- (1) Elevators and parts are maintained in a safe condition; and
- (2) All devices and safeguards required by these regulations are maintained in good working order.

AMENDATORY SECTION (Amending WSR 07-24-041, filed 11/30/07, effective 1/1/08)

WAC 296-96-23100 Are keys required to be on-site? Yes.

(1) The keys to the machine room and the keys that are necessary to operate the elevator must be located in a locked key retainer box in the elevator lobby; or located by machine room doors at no more than six feet above the floor, provided access to the key box doesn't require passage through locked doors. The key retainer box must be:

- (a) Readily accessible to authorized personnel;
- (b) Clearly labeled "Elevator"; and
- (c) Equipped with a 1-inch cylinder cam lock key #39504.

Further:

Keys for access to elevator machine rooms and for operating elevator equipment must be tagged and kept in the key box.

The key box must contain all keys necessary for inspections of the elevator.

Mechanical hoistway access devices must be kept in the key box or machine room.

(2) The department may approve existing retainer boxes provided they are:

- (a) Readily accessible to authorized personnel;
- (b) Clearly labeled "Elevator"; and
- (c) The lock must be either a 1-inch cylinder cam lock key #39504

or a combination lock. The combination for the lock must be on record with the department.

Deviations from this section due to security concerns must be approved by the department via a variance request.

Note: The cities of Seattle and Spokane may designate their own options for keys and lock box arrangement via their rule processes.

(3) ASME A17.1-2.27.8 Local fire or building code authorities may specify the requirements for a uniform keyed lock box and its location to contain the necessary keys (this will be in addition to the requirements listed in subsection (1) or (2) of this section). Where required, a lock box, including its lock and other components, shall conform to the requirements of UL 1037 (see Part 9). These keys shall be kept on the premises in a location readily accessible to firefighters and emergency personnel, but not where they are available to the public.

(4) ASME A17.1 Part 8 contains general requirements for new and existing equipment. Except reference ASME A17.1-2.27.8 shall not apply to phase one and two key switches installation on existing elevators installed prior to the adoption of this code unless required by the local code official.

~~((Subpart I
Hoistways and Related Construction for Electric
and Hydraulic Elevators))~~

AMENDATORY SECTION (Amending WSR 04-12-047, filed 5/28/04, effective 6/30/04)

~~WAC 296-96-23101 What ((is the scope of Subpart I)) are the conveyance number requirements? ((1) Subpart I, Hoistways and Related Construction for Electric and Hydraulic Elevators, is the minimum standard for all existing hydraulic and electric elevators. It applies to other equipment only as referenced in the applicable part.~~

~~(2) This subpart does not apply to elevators located in grain terminals, residential elevators, or special purpose elevators.)) Conveyance numbers shall be permanently painted or etched to the controller or if space does not allow, the disconnect switch. The numbers shall be legible and at a minimum of one-half inch in height or as directed by the authority having jurisdiction.~~

**Subpart I
Hoistways and Related Construction for Electric
and Hydraulic Elevators**

NEW SECTION

WAC 296-96-23105 What is the scope of Subpart I? (1) Subpart I, Hoistways and Related Construction for Electric and Hydraulic Elevators, is the minimum standard for all existing hydraulic and electric elevators. It applies to other equipment only as referenced in the applicable part.

(2) This subpart does not apply to elevators located in grain terminals, residential elevators, or special purpose elevators.

AMENDATORY SECTION (Amending WSR 01-02-026, filed 12/22/00, effective 1/22/01)

WAC 296-96-23216 What requirements apply to the lining materials used on passenger car enclosures? Materials used for passenger car linings must meet the following specifications:

(1) Carpeting without padding may be used for interior finishes provided that it has a Class I rating, a flame spread of 25 or less which must include all assembly components except the adhesive. The adhesive must be a slow-burning type.

(2) Slow-burning combustible materials, other than carpet, may be used for interior finishes provided the materials have a Class II rating or better (flame spread of 75 or less), which must include all assembly components other than the adhesive. Materials must be firmly bonded flat to the enclosure and must not be padded. Fabric with spray-type fireproofing must not be installed in elevators.

(a) Equivalent ratings in watts per centimeter squared as derived in the radiant panel test are also acceptable.

(b) .45 watts/cm squared or higher is equivalent to Class I or better.

(c) .22 watts/cm squared or higher is equivalent to Class II or better.

(d) In the radiant test, the higher the number the better the flame resistance.

(e) In the Class I and II system, the lower the number, the better the flame resistance.

(f) Smoke density of materials must be less than 450 when tested in accordance with UBC Standard No. 42.-1.

(3) Certification that the materials and assembly meet these requirements must be submitted to the building official.

Note: These specifications do not apply to new or alteration permits (see ASME code for requirements).

AMENDATORY SECTION (Amending WSR 01-02-026, filed 12/22/00, effective 1/22/01)

WAC 296-96-23408 How much clearance is required between skirt panels and step treads? The clearance on each side of the steps between the step tread and the adjacent skirt panel must be no more than 3/16 inch, unless otherwise stated in ASME A17.1-8.6.8.

Subpart VI
Alterations, Repairs ((and)), Maintenance, and Testing

AMENDATORY SECTION (Amending WSR 07-24-041, filed 11/30/07, effective 1/1/08)

WAC 296-96-23600 What is the scope of Part VI, Alterations, Repairs and Maintenance? Subpart VI, Alterations, Repairs and Maintenance, applies to periodic inspections, tests, alterations, ((and)) preventive maintenance, and routine examinations. The applicable code references are: ASME A17.1-Part 8, ASME A18.1-Part 10, ASME A90.1-Part 8, and appendix 2, ANSI A10.4-Part 26 & 27, ANSI A10.5-Part 4, and other requirements in this chapter.

NEW SECTION

WAC 296-96-23601 ASME A17.1-8.6.1.2.1 General maintenance requirements for conveyances regulated by ASME A17.1 Part 8. (1) ASME A17.1-8.6.1.2.1(4) All persons authorized per chapter 70.87 RCW and this chapter to perform maintenance shall have detailed, code required written procedures including, but not limited to, check out, inspection, testing, maintenance, and examination, which shall be in the mechanic's possession and available upon request to the department's personnel.

(2) ASME A17.1-8.6.1.2.1(4)(c) The maintenance records required by ASME A17.1-8.6.1.4 shall be kept at a central location either in the machine/control room, space or within the building where the conveyance exists. Other on-site locations as permitted by the department.

(3) ASME A17.1-8.6.1.2.1(d) The maintenance. Control program shall be accessible to the elevator owner, the owner's representative, inspector, and elevator service personnel and document compliance with 8.6, applicable sections of 8.11, and this chapter.

(4) Devices that remotely interact with conveyances covered by this chapter can create a hazard when used to effect a change in its controls. Therefore, any conveyance found operating with a device that can directly effect a change in its controls from a remote location is prohibited unless it is operated under the direct on-site supervision of a person who meets the definition of "licensed elevator mechanic."

Note: Remote operation controls, operated by building personnel located within the building, may be installed for security purposes upon approval of installation or alteration permit.
Table N-2, monitoring is for information only and shall not be a substitute for on-site inspections or examinations.

NEW SECTION

WAC 296-96-23602 ASME A17.1-8.6.1.4 Maintenance records. (1) ASME A17.1-8.6.1.4.1 Maintenance records shall document compliance with ASME A17.1-8.6 and the applicable parts of ASME A17.1-8.11 (see WAC 296-96-23605) and include records on the activities listed in ASME A17.1-8.6.1.4.1 (a) through (e). In addition, all maintenance, examinations, and safety tests shall be demonstrate with interval(s). Each task shall be defined by code reference number and month(s) the task is to be performed. A signature by the authorized mechanic shall demonstrate each completed task (initials are acceptable with a legible signature page). The layout for the records shall be similar to the sample supplied by the department on the elevator program web site.

(2) ASME A17.1-8.6.1.4.2 Record availability:

(a) Records shall be available in hard copy, maintained, and kept current, upon completion of the task(s);

(b) The maintenance records shall be in the machine room or other on-site location and immediately available to the elevator owner(s) and representative and conspicuously posted for the inspector and elevator personnel;

(c) Retention shall be for a period of six years; and

(d) The records must be available for an additional year for each category five test extended beyond twelve months.

(3) The owner or representative is responsible for installing and maintaining updated records in the machine room. The outdated log and records shall remain conspicuously posted in the machine room per the schedule in subsection (2) of this section. The records are the property of the owner and shall be made available to all elevator personnel.

NEW SECTION

WAC 296-96-23603 ASME A17.1-8.6.1.6.3(a) Wiring diagrams. Up-to-date wiring diagrams detailing all circuits including, but not limited to, electrical protective devices (see ASME A17.1-2.26.2) and critical operating circuits (see ASME A17.1-2.26.3) shall be available in the machinery space, machine room, control space, or control room as appropriate to the installation. Wiring diagrams shall not be removed from the machinery space, machine room, control space, or control room.

NEW SECTION

WAC 296-96-23604 ASME A17.1-8.6.1.7 Periodic tests. (1) The frequency of periodic tests shall be established by the department as required by ASME A17.1-8.11.1.3.

(a) Category one tests shall be performed twelve months from the previous category one tests.

(b) Category three tests shall be performed thirty-six months from the previous category three tests.

(c) Category five tests shall be performed sixty months from the previous category five tests.

(2) The tests shall be performed no later than thirty days past their due date. The owner or agent must seek written permission from the department to deviate from the schedule.

A civil penalty of five hundred dollars per month may be applied for noncompliance.

(3) ASME A17.1-8.6.1.7 The authority having jurisdiction may require that periodic tests or examination(s) be witnessed by an inspector employed by the authority having jurisdiction.

(4) Tag placement and use shall be in accordance with ASME A17.1-8.6.1.7.2 periodic test tags and the retention shall be equivalent to the maintenance control program records.

NEW SECTION

WAC 296-96-23605 ASME A17.1-8.6.4 Maintenance, examination and testing of elevators. (1) The maintenance, examination, and testing of electric elevators shall conform to ASME A17.1-8.6.1 through 8.6.4 and the applicable sections of 8.11.2 as amended below.

(a) ASME A17.1-8.11.2.1 Periodic examination requirements for electrical elevators. Service providers shall include the following when identifying components or systems, or both, that shall be examined if installed.

(b) ASME A17.1-8.11.2.1.1 Inside car:

- (i) Door reopening device;
- (ii) Stop switches;
- (iii) Operating control devices*;
- (iv) Car floor and landing sill**;
- (v) Car lighting**;
- (vi) Car emergency signal;
- (vii) Car door or gate;
- (viii) Door closing force;
- (ix) Power closing of doors or gates;
- (x) Power opening of doors or gates;
- (xi) Car enclosure*;
- (xii) Emergency exit;
- (xiii) Ventilation*;
- (xiv) Rated load, platform area, and data plate*;
- (xv) Restricted opening of car or hoistway doors;
- (xvi) Car ride*;
- (xvii) Door monitoring systems; and
- (xviii) Stopping accuracy*.

(c) ASME A17.1-8.11.2.1.2 Machine room/control room:

- (i) Equipment exposure to weather;
- (ii) Means of access**;
- (iii) Headroom**;
- (iv) Means necessary for tests;
- (v) Inspection and test panel;
- (vi) Lighting and receptacles**;
- (vii) Enclosure of machine room/control room**;
- (viii) Ventilation;
- (ix) Pipes, wiring, and ducts**;
- (x) Guarding of equipment;
- (xi) Numbering of elevators, machines, and disconnect switches;
- (xii) Maintenance path and maintenance clearance**;
- (xiii) Stop switch;
- (xiv) Disconnecting means and control;
- (xv) Controller wiring, fuses, grounding, etc.;
- (xvi) Machinery supports and fastenings;
- (xvii) Drive machine brake;
- (xviii) Traction drive machines;
- (xix) Gears, bearings, and flexible connections;
- (xx) Winding drum machine;
- (xxi) Belt or chain-drive machine;
- (xxii) Absorption of regenerated power;
- (xxiii) Traction sheaves;
- (xxiv) Secondary and deflector sheaves;
- (xxv) Rope fastenings;
- (xxvi) Operating devices;
- (xxvii) Code data plate**;
- (xxviii) AC drives from a DC source;
- (xxix) Slack rope devices;
- (xxx) Wiring diagrams;
- (xxxi) Rope retainers or restraints for seismic risk zones; and
- (xxxii) Seismic and displacement switches.

(d) ASME A17.1-8.11.2.1.3 Top-of-car:

- (i) Top-of-car stop switch;
- (ii) Car top light and outlet;
- (iii) Top-of-car operating device working platforms;
- (iv) Top-of-car clearance and refuge space**;
- (v) Top counterweight clearance;
- (vi) Car, overhead, and deflector sheaves;
- (vii) Crosshead data plate**;
- (viii) Top emergency exit;
- (ix) Floor and emergency identification numbering**;
- (x) Hoistway construction**;
- (xi) Hoistway smoke control**;
- (xii) Pipes, wiring, and ducts**;
- (xiii) Windows, projections, recesses, and setbacks**;
- (xiv) Hoistway clearance;
- (xv) Multiple hoistways**;
- (xvi) Traveling cables and junction boxes;
- (xvii) Door and gate equipment;
- (xviii) Car frame and stiles;
- (xix) Guide rails fastening and equipment;
- (xx) Governor rope;
- (xxi) Governor releasing carrier;
- (xxii) Fastening and hitch plate;
- (xxiii) Suspension means;
- (xxiv) Compensation means;
- (xxv) Machinery space/control space;
- (xxvi) Working areas on the car top;
- (A) Means to prevent unexpected movement.
- (B) Unexpected car movement device.
- (C) Operating instructions for unexpected car movement device.
- (D) Operating instructions for egress and reentry procedure;
- (xxvii) Equipment exposure to weather;
- (xxviii) Machinery supports and fastenings;
- (xxix) Guarding of exposed auxiliary equipment;
- (xxx) Anchoring of beams and supports in seismic risk zone 2 or greater;
- (xxxii) Rope retainers and snag guards in seismic risk zone 2 or greater;
- (xxxiii) Position restraints in seismic risk zone 2 or greater;
- (xxxiiii) Car and counterweight guide rails system in seismic risk zone 2 or greater;
- (xxxv) For seismic risk zones 2 or greater, horizontal clearance for car and counterweight, snag-point clearance and rail fastening;
- (xxxvi) Seismic risk zone 2 or greater rope retainers/restraints and snag guards;
- (xxxvii) Seismic risk zone 2 or greater rope retainer and snag guard for compensating ropes or chains and compensating tension sheave fastening; and
- (xxxviii) Sheaves with nonmetallic groove surfaces.
- (e) ASME A17.1-8.11.2.1.4 Outside hoistway:
 - (i) Car platform guard;
 - (ii) Hoistway doors;
 - (iii) Vision panels*;
 - (iv) Hoistway door locking devices;
 - (v) Access to hoistway;
 - (vi) Sequence operation;
 - (vii) Hoistway enclosure;
 - (viii) Elevator parking devices;

- (ix) Emergency and access hoistway openings;
- (x) Separate counterweight hoistway;
- (xi) Means necessary for tests;
- (xii) Inspection and test panel (ASME A17.1-2.7.6.5), inspection operation (ASME A17.1-2.26.1.4.1), and inspection operation with open door circuits; and
- (xiii) Equipment exposure to weather.
- (f) ASME A17.1-8.11.2.1.5 Pit:
 - (i) Pit access, lighting, stop switch and condition;
 - (ii) Bottom clearance and runby;
 - (iii) Traveling cables;
 - (iv) Compensating chains, ropes, and sheaves;
 - (v) Car frame and platform;
 - (vi) Machinery space/control space;
 - (vii) Working areas in the pit;
 - (A) Means to prevent unexpected movement.
 - (B) Unexpected car movement device.
 - (C) Operating instructions for unexpected car movement device.
 - (D) Operating instructions for egress and reentry procedure;
 - (viii) Equipment exposure to weather;
 - (ix) Machinery supports and fastenings;
 - (x) Guarding of exposed auxiliary equipment; and
 - (xi) Pit inspection operation.
- (g) ASME A17.1-8.11.2.1.7 Working platform:
 - (i) Working platforms; operating instructions;
 - (ii) Retractable stops; retractable stop electrical device; and
 - (iii) Inspection operation.

Note: (*) May be combined with other items on the log.
 (**) A visual component that must be reported to the owner.

(2) The maintenance, examination, and testing of hydraulic elevators shall conform to ASME A17.1-8.6.1 through ASME A17.1-8.6.3 and the applicable requirements of ASME A17.1-8.6.4, ASME A17.1-8.6.5, and ASME A17.1-8.11.3, as amended below.

(a) Periodic examination requirements for hydraulic elevators. Service providers shall include the following when identifying components or systems, or both, that shall be examined if installed.

- (b) ASME A17.1-8.11.3.1.1 Inside the car:
 - (i) Door reopening device;
 - (ii) Stop switches;
 - (iii) Operating control devices*;
 - (iv) Sill and car floor**;
 - (v) Car lighting and receptacles**;
 - (vi) Car emergency signal;
 - (vii) Car door or gate;
 - (viii) Door closing force;
 - (ix) Power closing of doors or gates;
 - (x) Power opening of doors or gates; car enclosure*;
 - (xi) Emergency exit;
 - (xii) Ventilation*;
 - (xiii) Signs and operating device symbols;
 - (xiv) Rated load, platform area, and data plate;
 - (xv) Restricted opening of car or hoistway doors;
 - (xvi) Car ride*;
 - (xvii) Door monitoring system; and
 - (xviii) Stopping accuracy*.
- (c) ASME A17.1-8.11.3.1.2 Machine room/control room:
 - (i) Equipment exposure to weather;

- (ii) Means of access**;
- (iii) Headroom**;
- (iv) Means necessary for tests;
- (v) Inspection and test panel;
- (vi) Lighting and receptacles**;
- (vii) Enclosure of machine room/spaces and control room/spaces**;
- (viii) Ventilation and heating;
- (ix) Pipes, wiring, and ducts**; guarding of equipment;
- (x) Numbering of elevators, machines, and disconnect switches;
- (xi) Maintenance path and maintenance clearance**;
- (xii) Stop switch;
- (xiii) Disconnecting means and control;
- (xiv) Controller wiring, fuses, grounding, etc.;
- (xv) Hydraulic power unit;
- (xvi) Tanks**;
- (xvii) Recycling operation; and
- (xviii) Wiring diagrams.

(d) ASME A17.1-8.11.2.1.3 Top of car:

- (i) Top-of-car stop switch;
- (ii) Car top light and outlet;
- (iii) Top-of-car operating device and working platforms;
- (iv) Top-of-car clearance and refuge space**;
- (v) Top emergency exit;
- (vi) Floor and emergency identification numbering**;
- (vii) Hoistway construction*;
- (viii) Hoistway smoke control**;
- (ix) Pipes, wiring, and ducts**;
- (x) Windows, projections, recesses, and setback**;
- (xi) Hoistway clearances**;
- (xii) Multiple hoistways**;
- (xiii) Traveling cables and junction boxes;
- (xiv) Door and gate equipment;
- (xv) Car frame and stiles;
- (xvi) Guide rails fastening and equipment;
- (xvii) Governor rope;
- (xviii) Wire rope fastening and hitch plate;
- (xix) Suspension rope;
- (xx) Slack rope device;
- (xxi) Traveling sheave;
- (xxii) Crosshead data plate**;
- (xxiii) Equipment exposure to weather;
- (xxiv) Machinery supports and fastenings; and
- (xxv) Guarding of equipment.

(e) ASME A17.1-8.11.3.1.4 Outside hoistway:

- (i) Car platform guard;
- (ii) Hoistway doors;
- (iii) Vision panels*;
- (iv) Hoistway door locking devices;
- (v) Access to hoistway;
- (vi) Power closing of hoistway doors;
- (vii) Sequence operation;
- (viii) Hoistway enclosure*;
- (ix) Elevator parking devices;
- (x) Emergency doors in blind hoistways;
- (xi) Inspection and test panel (ASME A17.1-3.7.1 and ASME A17.1-2.7.6.5), inspection operation (ASME A17.1-2.26.1.4.1), and inspection operation with open door circuits (ASME A17.1-2.26.1.5); and

- (xii) Equipment exposure to weather.
- (f) ASME A17.1-8.11.3.1.5 Pit:
 - (i) Pit access, lighting, stop switch, and condition;
 - (ii) Bottom clearance, runby, and minimum refuge space**;
 - (iii) Plunger and cylinder;
 - (iv) Traveling cables;
 - (v) Car frame and platform;
 - (vi) Supply piping;
 - (vii) Governor rope tension device;
 - (viii) Equipment exposure to weather;
 - (ix) Machinery supports and fastenings;
 - (x) Guarding of exposed auxiliary equipment;
 - (xi) Pit inspection operation; and
 - (xii) Seismic overspeed valve and pipe support.

Note: (*) May be combined with other items on the log.
 (**) A visual component that must be report to the owner.

(g) If it is determined the hydraulic cylinders system is not being maintained per ASME A17.1-8.6.5.7 and ASME A17.1-8.6.5.14, cylinders installed below ground shall conform to ASME A17.1-3.18.3.4 or to ASME A17.1-8.6.5.8(a) or ASME A17.1-8.6.5.8(b).

(h) The relief-valve adjustment shall be examined to ensure that the seal is intact. If the relief-valve seal is not intact, checks shall be conducted in accordance with ASME A17.1-8.6.5.14.1 and the state hydraulic overpressure form shall be used to document compliance. The form shall be left on-site and located in the machine room in a conspicuous location.

(3) The maintenance and examination of dumbwaiter, rack-and-pinion, screw-column, hand, incline, limited use limited application, private residence*, power sidewalk, rooftop, special purpose, and shipboard and construction elevators shall conform to ASME A17.1-8.6.1 through ASME A17.1-8.6.3 and the applicable requirements of ASME A17.1-8.6 and ASME A17.1-8.11 as amended in this chapter.

Note: (*) Chapter 70.87 RCW exempts private resident elevators from periodic inspections, but these maintenance guidelines provide the proper outline for the level of service that should be provided.

(4) The maintenance of material lifts without automatic transfer devices, hand pull and electric manlift, residential incline elevators shall conform to ASME A17.1-8.6.1 through ASME A17.1-8.6.3 and the applicable requirements of ASME A17.1-8.6 and ASME A17.1-8.11, as amended in this chapter*.

Maintenance, examination and test requirements shall only apply to the corresponding installation requirements in chapter 296-96 WAC.

Note: (*) Chapter 70.87 RCW exempts private resident elevators from periodic inspections, but these maintenance guidelines provide the proper outline for the level of service that should be provided.

(5) Periodic examination requirements for conveyances outlined in WAC 296-96-23605 (3) and (4). Service providers shall include the following when identifying components or systems, or both, that shall be examined if installed.

(a) ASME A17.1-8.11.5.1 Sidewalk elevator, WAC 296-96-23605 (1) or (2).

(b) ASME A17.1-8.11.5.2 Private resident elevators, WAC 296-96-23605 (1) or (2)*.

(c) ASME A17.1-8.11.5.3 Hand elevators, WAC 296-96-23605(1).

(d) ASME A17.1-8.11.5.4 Dumbwaiters, WAC 296-96-23605 (1) or (2).

(e) ASME A17.1-8.11.5.5 Material lifts and dumbwaiters with automatic transfer devices, WAC 296-96-23605 (1) or (2).

(f) ASME A17.1-8.11.5.6 Special purpose personnel elevators, WAC 296-96-23605 (1) or (2).

- (g) ASME A17.1-8.11.5.7 Inclined elevators, WAC 296-96-23605 (1) (a) through (2) or (3).
- (h) ASME A17.1-8.11.5.8 Shipboard elevators, WAC 296-96-23605 (1) or (2).
- (i) ASME A17.1-8.11.5.9 Screw-column elevators, WAC 296-96-23605 (1) or (2).
- (j) ASME A17.1-8.11.5.10 Rooftop elevators, WAC 296-96-23605 (1) or (2).
- (k) ASME A17.1-8.11.5.11 Rack-and-pinion elevators, WAC 296-96-23605 (1) and (2).
- (l) ASME A17.1-8.11.5.12 Limited-use/limited-application elevators, WAC 296-96-23605 (1) or (2).
- (m) ASME A17.1-8.11.5.13 Elevators used for construction, WAC 296-96-23605 (1) or (2).
- (n) These conveyances shall be subject to the corresponding ASME A17.1-8.11 examination requirements as applicable (see ASME A17.1 for sections references). The applicable items above shall be documented on the required records.

Note: Chapter 70.87 RCW exempts these elevators from periodic inspections, but these examination guidelines provide the proper outline for the level of service that should be provided.

(6) The maintenance and examination of escalators shall conform to ASME A17.1-8.6.1 through ASME A17.1-8.6.3 and ASME A17.1-8.6.8 and the applicable sections of ASME A17.1-8.11.4. The maintenance and examination of moving walks shall conform to ASME A17.1-8.6.1 through ASME A17.1-8.6.3, ASME A17.1-8.6.9 and the applicable sections of ASME A17.1-8.11.4, as amended below.

(a) Periodic examination requirements for escalators and moving walks: Service providers shall include the following when identifying components or systems, or both, that shall be examined if installed.

(b) ASME A17.1-8.11.4.1 Escalators and moving walks:

- (i) General fire protection;
- (ii) Geometry;
- (iii) Entrance and egress;
- (iv) Lighting;
- (v) Caution signs;
- (vi) Combplate;
- (vii) Deck barricade guard and antislid devices*;
- (viii) Steps and treadway;
- (ix) Operating devices;
- (x) Skirt obstruction devices;
- (xi) Handrail entry device;
- (xii) Egress restriction device;
- (xiii) Balustrades;
- (xiv) Ceiling intersection guards*;
- (xv) Skirt panels;
- (xvi) Outdoor protection*;
- (xvii) Additional stop switch(es);
- (xviii) Controller and wiring; and
- (xix) Code data plate**, other: Annual clean down WAC

296-96-23610(7).

Note: (*) May be combined with other items on the log.
 (**) A visual component that must be reported to the owner.

NEW SECTION

WAC 296-96-23606 ASME A17.1-8.11 Covers periodic inspections, examinations, and tests of existing ASME A17.1 installations. (1) ASME A17.1-8.11.1.1.1:

(a) Annual inspections shall be made by an inspector employed by the department having jurisdiction;

(b) The inspector shall submit a signed written report to the department containing the following information:

(i) Date of inspection; and

(ii) Code deficiencies noted during the inspection and a statement as to the corrective action to be taken, if any.

(2) Periodic or routine examinations shall be made by a person authorized by the department.

(a) Persons authorized are licensed mechanics and other authorized persons under RCW 70.87.270.

(b) The authorized mechanic shall submit a signature on the maintenance control record containing the following information:

(i) Date of examination(s);

(ii) ASME A17.1-8.11 components or systems that have been examined and performed according to this chapter;

(iii) Code deficiencies noted during the examination and a statement on the repair or replacement log as to corrective action taken, if any.

(3) ASME A17.1-8.11.1.4 Installation placed out-of-service.

(a) Maintenance, examinations, and safety tests shall not be required when an installation is placed "in red tag status." All code required maintenance, examinations, and safety tests must be up to date, prior to removal of the red tag.

(b) A conveyance in red tag status for two years or more shall be subject to witnessing by the inspector for the category tests due and may include ASME A17.1-8.11 items, before being placed back in service.

(c) Annual operating certificate, maintenance, examinations, inspections, and tests shall not be required when an installation is placed in "decommissioned status."

AMENDATORY SECTION (Amending WSR 08-23-085, filed 11/18/08, effective 12/19/08)

WAC 296-96-23610 What requirements apply to routine examinations and periodic (~~inspections and~~) or category 01, 03, and 05 safety tests? The owner (~~or the owner's agent~~) must ensure that her/his conveyances are (~~inspected~~) routinely examined and annually safety tested (~~on a periodic annual basis~~) by a person qualified to perform such services. All conveyances must be tested to the applicable code(s) by an elevator mechanic licensed in the appropriate category for the conveyance being tested. (~~(See appendix N in ASME A17.1.)~~)

~~(1) For annual testing of electric, hydraulic, and roped hydraulic elevators, a log indicating the date of testing with all pertinent data included must be posted in the machine room. The log must be completed by the qualified person performing the test.~~

~~(a) A log indicating the date of testing with all pertinent data included must be posted in the machine room. The log must be completed by the licensed elevator mechanic performing the test.~~

~~(b) It is the responsibility of the owner or the owner's representative to install an updated log sheet in the machine room; the outdated log shall remain posted in the machine room.)~~

(1) ASME A17.1-8.11.1.1.1 and ASME A17.1-8.11.1.1.2 Periodic and routine examinations and tests.

(a) Periodic tests as required in ASME A17.1-8.6 may be witnessed by an inspector employed by the authority having jurisdiction. The department authorizes mechanics licensed under this chapter to perform examinations and testing.

(b) For category 1 and 3 tests the authorized mechanic shall perform and submit a signed written report on the maintenance control log containing the code referenced devices tested and found compliant containing, but not limited to, the following information:

(i) Date of inspection;

(ii) Type of test(s) performed;

(iii) Detailed results of the test(s) including, but not limited to: Speed, governor trip speed, safety slide distance, relief valve setting, escalator/moving walk brake torque setting, etc.;

(iv) Code deficiencies noted during the test; and

(v) Statement as to any corrective action taken.

(c) For the category 5 test, the authorized mechanic shall complete a signed written report provided by the department containing, but not limited to, the information in (b)(i) through (v) and leave the report in a conspicuous location with the MCP logs.

The authorized mechanic shall sign on the space provided on the maintenance control log the code referenced devices tested and found compliant with the information addressed in (b)(i) through (v).

(2) ASME A17.1-8.11.1.3 Periodic and routine examination frequency. The frequency of periodic examinations shall be established by the authority having jurisdiction. Intervals for periodic and routine examinations in ASME A17.1-8.11:

(a) A minimum of once per year and more often as age, usage, environmental condition, and design quality dictate; and

(b) A conveyance periodic examination is considered out of compliance if more than thirty days past the interval. Inspectors will make a report to owners of noncompliance.

~~((2))~~ (3) Required for firefighters' service portion of the log. It is the owner's responsibility to test firefighters' service operation of Phase I and Phase II key switches quarterly and annually perform the smoke detector test.

Note: The fire service key switch(es) and smoke detector testing may be performed and logged by the building owner.

~~((3))~~ (4) For five-year and category 5 testing:

(a) A full-load safety test must be performed with weights on all conveyances (~~except hydraulic elevators~~).

(b) For roped hydraulic elevators a static load test with the full load on the car must also be performed.

(c) For tests administered under this subsection: ~~((i))~~ A safety tag with the date and company conducting the test must be permanently attached to the ~~(governor, safeties, and the rupture valves with a wire and seal)~~ controller.

~~((A))~~ (i) For vertical platform lifts and stair chairs the tag must be located at the disconnecting means.

~~((B))~~ (ii) Separate safety tags must be used to distinguish the no-load annual safety test and the five-year full load test.

~~((ii))~~ (5) Documentation must be ~~((submitted to the department))~~ retained in the machine room for the inspectors review and supplied on the form approved ((state form)) by the department.

~~((d))~~ (6) Qualified ~~((people))~~ personnel will conduct the test. A qualified person is either:

~~((i))~~ (a) An elevator mechanic licensed in the appropriate category for the conveyance being tested;

~~((ii))~~ (b) The representative of a firm that manufactured the particular conveyance, and who holds a current temporary mechanic's license in this state; or

~~((iii))~~ (c) The representative of a firm that manufactured the particular conveyance who is working under the direct supervision of an elevator mechanic licensed in the appropriate category for the conveyance being tested.

(7) Escalators shall be tested according to ASME A17.1 adopted and this chapter and completely cleaned annually. Upon completion of this work, the appropriate form indicating that the work ~~((was done))~~, including the skirt step index graph, has been completed and is in compliance. The documents must be ((submitted to)) left with the maintenance logs for the department inspector's review.

~~((4))~~ (8) All other conveyances requiring annual testing must have tags indicating the date and the name of the company and person who performed the test. When the required location for mounting the tag is not readily accessible, the tag may be mounted on the main line disconnect.

NEW SECTION

WAC 296-96-23621 ASME A17.1-8.7.1.7 Repairs and replacement. Repairs and replacements shall conform to ASME A17.1-8.6.2 and ASME A17.1-8.6.3. Repairs and replacements carried out as part of an alteration shall conform to the applicable ASME A17.1 or other adopted standards and requirements of this chapter.

NEW SECTION

WAC 296-96-23701 Periodic examinations and safety tests. (1) For five year and category 5 testing, in accordance with WAC 296-96-23610(4), a full-load safety test must be performed with weights on all accessibility equipment.

(2) ASME A18.1-10.1.2 The owner must ensure that the accessibility lifts are routinely examined and tested according to section 10.2 and periodically tested to 10.3. All conveyances must be tested to the applicable code(s) by an elevator mechanic licensed in the appropriate category for the lift being tested. An inspector employed by the department may witness the examinations or test.

AMENDATORY SECTION (Amending WSR 07-24-041, filed 11/30/07, effective 1/1/08)

WAC 296-96-23710 What requirements apply to lifts for the physically handicapped? On installations prior to 7/1/2004: Inclined and vertical chairlifts and inclined and vertical wheelchair lifts installed only for use by persons with disabilities in locations other than in or at a private residence must be equipped with a standard electric switch Chicago lock with key #2252. Owners are responsible for properly securing their lift during hours of nonuse.

EXCEPTION: See WAC 296-96-02370 for key alterations. If code clearances meant for wing walls are installed, the #2252 key requirement is not in effect (see ASME A18.1).

This requirement is in addition to ASME A18.1, and the current Washington state rules and regulations on barrier-free design located in ANSI A117.1 in effect via the State Building Code (IBC).

REPEALER

The following section of the Washington Administrative Code is repealed:

WAC 296-96-02565 What are the requirements for top of car lighting for freight and passenger elevators?