

WSR 21-04-133
PROPOSED RULES
DEPARTMENT OF
LABOR AND INDUSTRIES
[Filed February 2, 2021, 12:08 p.m.]

Original Notice.

Preproposal statement of inquiry was filed as WSR 18-14-114.

Title of Rule and Other Identifying Information: Chapter 296-155 WAC, Safety standards for construction work, Part S, Demolition.

Hearing Location(s): On March 9, 2021, at 9:00 a.m. PST (United States and Canada). Zoom hearing, join Zoom meeting at <https://us02web.zoom.us/j/96415633015>, Meeting ID 964 1563 3015, Passcode ^.G7vEar, join by phone +1 253 215 8782 US (Tacoma), Meeting ID 964 1563 3015, Passcode 58967172. The hearing starts at 9:00 a.m. and will continue until all oral comments are received.

Date of Intended Adoption: April 20, 2021.

Submit Written Comments to: Cathy Coates, P.O. Box 44620, Olympia, WA 98504-4620, email Cathy.Coates@lni.wa.gov, fax 360-902-5619, by March 19, 2021.

Assistance for Persons with Disabilities: Contact Cathy Coates, phone 360-902-5432, fax 360-902-5619, email Cathy.Coates@lni.wa.gov, by February 16, 2021.

Purpose of the Proposal and Its Anticipated Effects, Including Any Changes in Existing Rules: The division of occupational safety and health (DOSH) is updating the requirements in chapter 296-155 WAC, Safety standards for construction work, Part S, Demolition. The rule making was initiated to remove confusing and unnecessary language, add clarification where necessary throughout the rule to improve safety, and make other updates and housekeeping changes throughout this chapter where needed.

Following an investigation of demolition violations related to the Highway 410 overpass collapse and a subsequent review of the citation history for the demolition requirements under chapter 296-155 WAC, Part S, the department of labor and industries (L&I) determined that rule changes were needed to ensure that demolition plans were developed and implemented.

While the current rule requires a demolition survey with a demolition plan be conducted prior to starting demolition, neither DOSH's rule nor the Occupational Safety and Health Administration (OSHA) explicitly require the employer to follow the demolition plan it developed or the safety recommendations contained in the survey. Based on a review of past inspections, including Highway 410 overpass collapse inspection, it was determined that without a clear requirement to require a demolition plan that is based on the engineering survey information, more incidents exposing workers and the public are likely to occur.

If demolition is not conducted according to a plan consistent with the engineering survey, hazards such as unplanned collapses and hazards from flying or dropping debris, can injure both workers and the public. The proposed rule requires a demolition plan be developed specific to a particular demolition project and in consideration of the engineering survey for the specific project and that the plan be implemented.

DOSH is also making changes to remove confusing and unnecessary language, as well as add clarification where necessary throughout the

rule to improve employee and public safety. Other updates and house-keeping changes are being made throughout this chapter.

New Section:

WAC 296-155-774 Definitions and applicability. Specifically, the proposed rule will:

- Include a scope of the rule.
- Add the following new definitions to this subpart: Competent person and demolition.
- Add the following references related to the use of equipment: Ladder use requirements found in chapter 296-876 WAC; scaffolds use found in chapter 296-874 WAC; crane and derricks use found in chapter 296-155 WAC, Part L; elevated work platforms found in chapter 296-869 WAC; and use of hoists found in chapter 296-155 WAC, Part R.

Amended Sections:

WAC 296-155-775 Preparatory operations.

- Add clarifying language to subsection (1)(a). Proposed changes clarifies [clarify] that the determination of structural integrity includes the condition and structural integrity of framing, floors, and walls under subsection (1)(a). This language is also consistent with OSHA's requirement under 29 C.F.R. 1926.850(a).
- Renumber subsection (2) to subsection (1)(b) and add clarifying language that a copy of engineering survey is to be kept on the job site for the duration of the demolition operation.
- Add subsection (2)(a) requiring the development and implementation of a written demolition plan to incorporate conditions identified in the engineering survey.
- Add subsection (2)(b) to ensure that the written demolition plan be available on-site for inspection.
- Delete content in subsection (3), and renumber the following items.
- Reword subsection (4) for clarity.
- Update subsection (8) to divide into three new subsections (a), (b), and (c) to provide clarification.
- Subsection (8)(a) adds reference to adjacent structures that could be affected by the demolition operation.
- Subsection (8)(b) clarifies testing must be performed and hazards eliminated before demolition is started.
- Subsection (8)(c) adds reference to other federal, state, or local regulations, laws, or rules.
- Update title of subsection (9) to address removal of material that may cause dust to be formed.
- Add subsection (9)(a) to address the removal of material exposing employees to airborne hazards by following requirements in chapter 296-841 WAC, Airborne contaminants.
- Add subsection (9)(b) to address the removal of material exposing employees to respirable crystalline silica by following requirements in chapter 296-840 WAC, Respirable crystalline silica.
- Add language to subsection (10) to state hazards must be removed prior to starting demolition activities.
- Update language in subsection (11) whereby workers will be protected by the use of a guardrail system, safety net system, personal fall arrest system, or personal fall restraint system. Add language to clarify that a wall opening can include those with chutes attached. Add language to clarify when a hazard exists

from wall openings. Changes are to align with and be as-effective-as OSHA requirements. The current WAC requires protection "to a height of between 36 and 42 inches." OSHA's demolition rule requires protection "to a height of approximately 42 inches." OSHA's fall protection rule under 29 C.F.R. 1926.502 (b)(1) requires the "top edge height of top rails, or equivalent guardrail system members, shall be 42 inches plus or minus 3 inches above the walking/working level." The current requirement allowing a guardrail height of less than 39 inches is not-as-effective-as OSHA's requirements. This change will also align with the guarding requirements for openings in the unified fall protection standard under WAC 296-880-20005(4), previously under chapter 296-155 WAC, Safety standards for construction work, Part C-1, Fall protection requirements for construction, in WAC 296-155-24609. These are additional options that an employer can chose [choose] to use as an alternative to the requirement for guardrails.

- Add title in subsection (13) "Cover requirement-holes."
- Update language in subsection (13)(a) regarding load weight for hole covers. Add language to clarify the strength requirements for a hole cover to be consistent with the requirements under OSHA's construction fall protection rule under 29 C.F.R. 1926.502 (i)(2), and OSHA's 29 C.F.R. 1910.29 (e)(1) General Industry Standard; and, under DOSH's rule, chapter 296-880, Unified safety standards for fall protection. Requirement to cover holes addressed in WAC 296-880-20005(3). Cover specifications (strength) are addressed in WAC 296-880-40015.
- Add subsection (13)(b) to address signage to increase hazard warnings: "You must mark each cover with the word 'hole' or 'cover' to provide warning of the hazard." The current rule is silent on the marking of floor hole covers, however, the covers are fall protection and marking is required under OSHA 29 C.F.R. 1926.502 (i)(2) and DOSH's unified fall protection rule. Proposed changes will ensure alignment with the fall protection standards in WAC 296-880-40015(3).
- Update language in subsection (13)(c) regarding covers to read: "You must secure all covers to prevent accidental displacement by wind, equipment, or employees." Clarifies what it means to secure material against accidental movement means to secure to prevent displacement by wind, equipment, and employees. The [rule] also aligns DOSH's chapter 296-880 WAC, Unified safety standards for fall protection. The securing of floor opening covers in [is] covered under WAC 296-880-40015(2).
- Delete the term "completely" from subsection (16). The word "completely" is not defined in the standard, and is not necessary for implementation of the subsection. Completely is implied in the need to protect employees.
- Update language in subsection (17) for clarity to read: "You must withdraw, drive in, or bend over nails protruding from boards, planks or timber as soon as the same is removed from the structure being demolished." Proposed changes clarify the rule language using plain talk standards to make the rule more understandable.
- Delete subsection (18) as addressed under new language under WAC 296-155-775(9).

WAC 296-155-780 Stairs, passageways, and ladders.

- Replace the word "covered" with "cover" for clarity.

WAC 296-155-785 Chutes.

- Add language to update subsection (1) to be in accordance with WAC 296-155-775(12).
- Delete the word "substantial" from subsection (3), as it is not defined in chapter 296-155 WAC, Safety standards for construction work. Proposed changes clarify the rule language using plain talk standards to make the rule more understandable.
- Update language in subsection (5) to delete the word "substantial" and replace with the word "standard." Proposed change is to clarify that a "substantial" guardrail is a "standard" guardrail. Update the height of a guardrail from "36 to 42 inches" to "39 to 45 inches." Proposed changes are to align with OSHA to be as-effective-as OSHA requirements. Current language requires a "substantial guardrail between 36 and 42 inches above the floor [or] other surface" is less effective than OSHA. While OSHA's Demolition rule requires guarding to a height of 42 inches, OSHA's fall protection rule under 29 C.F.R. 1926.502 (b)(1) requires a top guard rail of 42 inches plus or minus 3 inches above the walking/working level (a minimum of 39 inches and a maximum of 45 inches). As such, requiring the height to be at least 39 inches is as-effective-as OSHA. This change also aligns with the wall opening requirements (top height of 39 inches) under DOSH's unified safety standards for fall protection in WAC 296-880-20005(4).

WAC 296-155-790 Removal of materials through floor openings.

- Delete the word "safely," as it is not defined in chapter 296-155 WAC, Safety standards for construction work. Proposed change is to clarify rule language using plain talk standards to make the rule more understandable. The term "safely" is implied.

WAC 296-155-795 Removal of walls, masonry sections, and chimneys.

- Update subsection (9) for clarity and delete the word "safely," as it is not defined in chapter 296-155 WAC, Safety standards for construction work. Proposed change is to clarify rule language using plain talk standards to make the rule more understandable. The term "safely" is implied.

WAC 296-155-810 Catch platforms.

- Update language in subsection (4) to state "Catch platforms must meet the strength requirements of supported scaffolds in chapter 296-874 WAC." Proposed language added based upon OSHA "Not At Least as Effective As" determination letter to DOSH regarding catch platforms. OSHA considers catch platforms to be scaffolds and as such have to meet the requisite strength and stability requirements of scaffolds.

Reasons Supporting Proposal: If demolition is not conducted according to a plan consistent with the engineering survey, hazards such as unplanned collapses and hazards from flying or dropping debris, can injure both workers and the public. The proposed rule requires a demolition plan be developed specific to a particular demolition project and in consideration of the engineering survey for the specific project and that the plan be implemented.

Proposed changes to align with chapter 296-880 WAC, Unified safety standards for fall protection; and to align with and be as-effec-

tive-as OSHA requirements under OSHA's fall protection, demolition, and general industry rules.

During the stakeholder process, many stakeholders expressed the proposed changes are considered industry best and standard practices, and industry participants have already been executing the requirements in their regular demolition operations.

When L&I updated its website, template DOSH rules in HTML were broken and DOSH began forwarding rule users to the office of the code reviser website, causing more confusion among customers. This rule package will resolve stakeholder issues that have caused confusion for rule users by bringing one clear and consistent format to all of our rules.

Statutory Authority for Adoption: RCW 49.17.010, 49.17.040, 49.17.050, 49.17.060.

Statute Being Implemented: Chapter 49.17 RCW.

Rule is not necessitated by federal law, federal or state court decision.

Name of Proponent: L&I, governmental.

Name of Agency Personnel Responsible for Drafting: Chris Miller, Tumwater, Washington, 360-902-5516; Implementation and Enforcement: Craig Blackwood, Acting Assistant Director, DOSH, Tumwater, Washington, 360-902-5828.

A school district fiscal impact statement is not required under RCW 28A.305.135.

A cost-benefit analysis is required under RCW 34.05.328. A preliminary cost-benefit analysis may be obtained by contacting Cathy Coates, Administrative Regulations Analyst, L&I, DOSH, P.O. Box 44620, Olympia, WA 98504-4620, phone 360-902-5432, fax 360-902-5619, email Cathy.Coates@Lni.wa.gov.

This rule proposal, or portions of the proposal, is exempt from requirements of the Regulatory Fairness Act because the proposal:

Is exempt under RCW 19.85.025(3) as the rules are adopting or incorporating by reference without material change federal statutes or regulations, Washington state statutes, rules of other Washington state agencies, shoreline master programs other than those programs governing shorelines of statewide significance, or, as referenced by Washington state law, national consensus codes that generally establish industry standards, if the material adopted or incorporated regulates the same subject matter and conduct as the adopting or incorporating rule; and rules only correct typographical errors, make address or name changes, or clarify language of a rule without changing its effect.

The proposed rule does not impose more-than-minor costs on businesses. Following is a summary of the agency's analysis showing how costs were calculated. The agency identified the following sections of the rule as nonexempt from analysis.

WAC 296-155-775(2): Currently, the demolition contractor is required to conduct an engineering survey to determine structural integrity and the possibility of unplanned collapse of any portion of the structure including any adjacent structures where employees may be exposed and to keep a copy of the survey report at the job site for the duration of demolition operation. The current rule also requires demolition contractors to keep a copy of the "plans and/or methods of operations" at the job site. However, the current rule does not explicitly require the employer to develop and follow the demolition plan or the safety recommendations contained in the survey. This proposed sub-

section is new and creates new requirements to (i) develop and implement a written tailored demolition plan incorporating structures from the engineering survey as well as the aforementioned conditions; and (ii) make the plan available on-site for inspection. This requirement therefore creates a new cost for the demolition contractor.

The increasing digitization of material and use of digital devices means the demolition contractor can have the entire demolition plan in digital form available on-site on a laptop or other mobile device at no additional cost. Therefore, the department believes that the requirement to make the demolition plan available on-site for inspection would impose minimal compliance costs for the demolition contractor.

As discussed in the cost-benefit analysis, L&I researchers conducted a survey of a representative sample of the businesses involved in various types of demolition activities, and their potential economic impact from the proposed amendments. The sample of two hundred twenty-seven businesses was randomly chosen from (1) a list of contractors obtained from demolition permit data from various counties, (2) the results of a general web search for demolition contractors in Washington state. The major amendments proposed by this rule making are related to site preparation during the demolition process. The demolition process ranges from the survey of the demolition site and any adjacent structure(s) to the physical deconstruction of the interior or the actual tear down of the substructure or super structure. The industries most directly involved in these activities include both residential and nonresidential/commercial construction operations, so the rule would mostly impact those businesses engaged in such projects:

Industries Likely Affected by the Proposed Rule:

4-Digit NAICS	Industry Group	6-Digit NAICS	Industry
2361	Residential Building Construction	236115	New Single-family Housing Construction (except for-sale builders)
		236116	New Multifamily Housing Construction (except for-sale builders)
		236117	New Housing For-Sale Builders
		236118	Residential Remodelers
2362	Nonresidential Building Construction	236210	Industrial Building Construction
		236220	Commercial and Institutional Building Construction
2371	Utility System Construction	237110	Water and Sewer Line and Related Structures Construction
		237120	Oil and Gas Pipeline and Related Structures Construction
2373	Highway, Street, and Bridge Construction	237310	Highway, Street, and Bridge Construction
2379	Other Heavy and Civil Engineering Construction	237990	Other Heavy and Civil Engineering Construction
2381	Foundation, Structure and Building Exterior Contractors	238120	Structural Steel and Precast Concrete Contractors
		238130	Framing Contractors
		238140	Masonry Contractors

4-Digit NAICS	Industry Group	6-Digit NAICS	Industry
		238190	Other Foundation, Structure, and Building Exterior Contractors
2382	Building Equipment Contractors	238210	Electrical Contractors and Other Wiring Installation Contractors
2389	Other Specialty Trade Contractors	238910	Site Preparation Contractors

L&I analyzed the estimates for the total cost for the proposed demolition plan requirement based on the median cost per square feet and the total size of all projects annually. L&I relied on the total number of businesses in these cost-bearing industries to estimate the per-business cost.

Estimated cost for compliance with development and implementation of a demolition plan:

	Small Project	Medium Project	Large Project	Total
Total sq. ft. of work covered by demolition plans per year*	1.85 million	8.90 million	13.74 million	24.62 million
Median cost per sq. ft.	\$0.58	\$0.26	\$0.24	-
Total annual cost - low	\$443,581	\$2,135,481	\$3,298,447	\$5,877,509
Total annual cost - high	\$1,071,987	\$5,160,746	\$7,971,247	\$14,203,980

* These numbers are derived from the surveyed sample of businesses that reported the size of each type of projects (small, medium, large) and the number of projects they perform each year. Then the average total number of square footage of work per business per year is multiplied by the number of affected businesses to arrive at the total square footage of work for the whole population.

When compared to the minor-cost threshold (one percent of annual payroll), it clearly indicates the average per-business cost of these proposed rule amendments is far below the threshold for businesses in any of the affected industries analyzed. L&I determined a small business economic impact statement is not required for this rule making pursuant to RCW 19.85.030(1).

Average Cost V.S. Minor Cost Threshold:

4-Digit NAICS	Industry Description	Average Number of Firms	1% of Annual Payroll	Regulatory Cost Per Business (Low to High)	
2361	Residential Building Construction	7,380	\$24,241.38	\$356.25	\$1,178.55
2362	Nonresidential Building Construction	1,089	\$68,979.37	\$1,907.89	\$6,311.82
2371	Utility System Construction	362	\$36,963.62	\$1,429.21	\$4,728.22
2373	Highway, Street, and Bridge Construction	250	\$20,427.19	\$2,466.36	\$8,159.37
2379	Other Heavy and Civil Engineering Construction	170	\$18,625.89	\$1,724.97	\$5,706.66
2381	Foundation, Structure and Building Exterior Contractors	1,453	\$69,246.64	\$683.38	\$2,260.79
2382	Building Equipment Contractors	2,124	\$20,441.56	\$1,009.22	\$3,338.78
2389	Other Specialty Trade Contractors	934	\$10,654.49	\$656.13	\$2,170.64
TOTAL		14,210			

* The per business cost was determined by the proportion of the average annual employment to the low and high cost range.

February 2, 2021
Joel Sacks
Director

OTS-2035.6

NEW SECTION

WAC 296-155-774 Definitions and applicability. This part sets forth requirements to protect employees from hazards associated with demolition operations.

Competent person. One who is capable of identifying existing and predictable hazards in the surroundings or working conditions which are unsanitary, hazardous, or dangerous to employees, and who has authorization to take prompt corrective action to eliminate them.

Demolition. Dismantling, razing, destroying, or wrecking any building or structure or any part thereof, including any related handling operations.

When a provision of this chapter conflicts with a provision of another vertical safety standard applying to the place of work, the provisions of the vertical standard of specific application will prevail.

Reference:

Requirements for the use of ladders found in chapter 296-876 WAC.

Requirements for the use of scaffolds found in chapter 296-874

WAC.

Requirements for the use of cranes and derricks found in chapter 296-155 WAC, Part L.

Requirements for the use of elevated work platforms found in chapter 296-869 WAC.

Requirements for the use of hoists found in chapter 296-155 WAC, Part R.

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AMENDATORY SECTION (Amending WSR 16-09-085, filed 4/19/16, effective 5/20/16)

WAC 296-155-775 Preparatory operations. (1) (a) Prior to permitting employees to start demolition operations, ((you must make an engineering survey, by a competent person,)) a competent person must perform an engineering survey of the structure(s) to determine the condition and structural integrity of the framing, floors, walls, and the possibility of unplanned collapse of any portion of the structure(s). Any adjacent structure(s) where employees may be exposed must also be similarly checked. ((You must similarly check adjacent structures where employees may be exposed. You must have in writing, evidence that such a survey has been performed.

(2) You must maintain a copy of the survey report and of the plans and/or methods of operations at the job site for the duration of the demolition operation)) (b) You must maintain a copy of the engineering survey at the job site for the duration of the demolition operation.

(2) (a) You must develop and implement a written demolition plan tailored to the operation and to the types of hazards involved. The demolition plan must incorporate conditions of the framing, floors, and walls, and potential of unplanned collapse of any portion of the structure(s) identified in the engineering survey.

(b) The demolition plan must be available on the job site for inspection by the department.

~~(3) ((Any device or equipment such as scaffolds, ladders, derricks, hoists, etc., used in connection with demolition work must be constructed, installed, inspected, maintained and operated in accordance with the regulations governing the construction, installation, inspection, maintenance and operation of such device or equipment as specified in other parts of this chapter.~~

~~(4))~~ You must observe federal and state codes, safety standards, rules, regulations, and ordinances governing any and all phases of demolition work at all times.

~~((5))~~ (4) You must conduct demolition of all buildings and structures under ~~((competent))~~ the supervision ~~((, and you must afford safe working conditions to the employees))~~ of a competent person.

~~((6))~~ (5) When employees are required to work within a structure to be demolished which has been damaged by fire, flood, explosion, or other cause, you must shore or brace the walls or floors.

~~((7))~~ (6) You must shut off, cap, or otherwise control all electric, gas, water, steam, sewer, and other service lines outside the building line before demolition work is started. In each case, you must notify any utility company which is involved in advance.

~~((8))~~ (7) If it is necessary to maintain any power, water or other utilities during demolition, such lines must be temporarily re-located, as necessary, and protected.

~~((9))~~ (8)(a) You must determine ~~((whether))~~ if asbestos, hazardous materials, hazardous chemicals, gases, explosives, flammable materials, or similarly dangerous substances are present at the ~~((work site))~~ worksite and adjacent structures that could be affected by the demolition operation.

(b) When the presence of any such substance is apparent or suspected, ~~((you must perform))~~ testing and removal ~~((or purging and eliminate))~~ must be performed and the hazard eliminated before demolition is started.

(c) Testing and removal of such substances must be in accordance with the requirements of chapters 296-62 and 296-65 WAC, and any other applicable federal, state, or local regulations, laws, or rules.

(9) When the removal of material may cause dust to be formed:

(a) When the removal of material may expose employees to airborne hazards the requirements in chapter 296-841 WAC must be followed.

(b) When the removal of material may expose employees to respirable crystalline silica, the requirements in chapter 296-840 WAC must be followed.

(10) Where a hazard exists from fragmentation of glass, you must remove such hazards prior to starting demolition activities.

~~((Where a hazard exists to employees falling through wall openings, you must protect the opening to a height of between 36 and 42 inches.))~~ You must ensure that each employee working on, at, above, or near wall openings (including those with chutes attached) where the outside bottom edge of the wall opening is 4 feet or more above a lower level and the inside bottom edge of the wall opening is less than 39 inches above the working surface, are protected from falling by the use of a guardrail system, safety net system, personal fall arrest system, or personal fall restraint system in accordance with chapter 296-880 WAC, Unified safety standards for fall protection.

(12) When debris is dropped without the use of chutes, the area onto which the material is dropped must be completely enclosed with barricades not less than 42 inches high and not less than 20 feet back

from the projected edge of the opening above. You must post signs, warning of the hazard of falling materials, at each level. You must not permit removal in this lower area until debris handling ceases above.

~~(13) ((All floor openings, not used as material drops, must be covered over with material substantial enough to support the weight of any load which may be imposed))~~ Cover requirement - Holes.

(a) Hole covers must be capable of supporting, without failure, at least twice the weight of employees, equipment, and materials that may be imposed on the cover at any one time.

(b) You must mark each cover with the word "hole" or "cover" to provide warning of the hazard.

(c) You must ((properly)) secure ((such material)) all covers to prevent ((its)) accidental ((movement)) displacement by wind, equipment, or employees.

(14) Except for the cutting of holes in floors for chutes, holes through which to drop materials, preparation of storage space, and similar necessary preparatory work, you must begin the demolition of exterior walls and floor construction at the top of the structure and proceed downward. You must remove and drop each story of exterior wall and floor construction into the storage space before commencing the removal of exterior walls and floors in the story next below.

(15) You must not permit workers to carry on a demolition operation which will expose persons working on a lower level to danger.

(16) You must ~~((completely))~~ protect employee entrances to multi-story structures being demolished by sidewalk sheds or canopies, or both, providing protection from the face of the building for a minimum of 8 feet. All such canopies must be at least two feet wider than the building entrances or openings (one foot wider on each side thereof), and must be capable of sustaining a load of 150 pounds per square foot.

(17) You must withdraw, drive in, or bend over nails protruding ~~((nails in))~~ from boards, planks ~~((and))~~ or timber ~~((, driven in or bent over))~~ as soon as the same is removed from the structure being demolished.

~~((18) You must sprinkle any material to be removed which will cause dust to be formed, with water to lay the dust incidental to its removal.))~~

[Statutory Authority: RCW 49.17.010, 49.17.040, 49.17.050, 49.17.060. WSR 16-09-085, § 296-155-775, filed 4/19/16, effective 5/20/16. Statutory Authority: Chapter 49.17 RCW. WSR 94-15-096 (Order 94-07), § 296-155-775, filed 7/20/94, effective 9/20/94; WSR 87-24-051 (Order 87-24), § 296-155-775, filed 11/30/87. Statutory Authority: RCW 49.17.050(2) and 49.17.040. WSR 87-10-008 (Order 87-06), § 296-155-775, filed 4/27/87. Statutory Authority: RCW 49.17.040 and 49.17.050. WSR 86-03-074 (Order 86-14), § 296-155-775, filed 1/21/86; Order 74-26, § 296-155-775, filed 5/7/74, effective 6/6/74.]

AMENDATORY SECTION (Amending WSR 16-09-085, filed 4/19/16, effective 5/20/16)

WAC 296-155-780 Stairs, passageways, and ladders. (1) You must only use those stairways, passageways, and ladders, designated as

means of access to the structure of building. Other access ways must be entirely closed off at all times.

(2) You must periodically inspect all stairs, passageways, ladders and incidental equipment thereto, which are covered by this section and maintain them in a clean safe condition.

(3) You must secure all ladders in position.

(4) In a multistory building, when a stairwell is being used, you must properly illuminate by either natural or artificial means, and completely and substantially (~~covered~~) cover over at a point not less than two floors below the floor on which work is being performed. Access to the floor where the work is in progress must be through a properly lighted, protected, and separate passageway.

[Statutory Authority: RCW 49.17.010, 49.17.040, 49.17.050, 49.17.060. WSR 16-09-085, § 296-155-780, filed 4/19/16, effective 5/20/16; Order 74-26, § 296-155-780, filed 5/7/74, effective 6/6/74.]

AMENDATORY SECTION (Amending WSR 16-09-085, filed 4/19/16, effective 5/20/16)

WAC 296-155-785 Chutes. (1) You must not drop any material to any point lying outside the exterior walls of the structure unless the area is (~~effectively~~) protected in accordance with WAC 296-155-775(12).

(2) All materials chutes, or sections thereof, at an angle of more than 45° from the horizontal, must be entirely enclosed, except for openings equipped with closures at or about floor level for the insertion of materials. The openings must not exceed 48 inches in height measured along the wall of the chute. At all stories below the top floor, you must keep such openings closed when not in use.

(3) You must install a (~~substantial~~) gate in each chute at or near the discharge end. A competent employee must be assigned to control the operation of the gate, and the backing and loading of trucks.

(4) When operations are not in progress, you must securely close off the area surrounding the discharge end of a chute.

(5) You must protect any chute opening, into which workers dump debris, by a (~~substantial~~) standard guardrail between (~~(36)~~) 39 and (~~(42)~~) 45 inches above the floor or other surface on which the employees stand to dump the material. You must solidly cover over any space between the chute and the edge of openings in the floors through which it passes.

(6) Where the material is dumped from mechanical equipment or wheelbarrows, you must provide a securely attached toeboard or bumper, not less than 4 inches thick and 6 inches high, at each chute opening.

(7) Chutes must be designed and constructed of such strength as to eliminate failure due to impact of materials or debris loaded therein.

[Statutory Authority: RCW 49.17.010, 49.17.040, 49.17.050, 49.17.060. WSR 16-09-085, § 296-155-785, filed 4/19/16, effective 5/20/16. Statutory Authority: Chapter 49.17 RCW. WSR 94-15-096 (Order 94-07), § 296-155-785, filed 7/20/94, effective 9/20/94; Order 74-26, § 296-155-785, filed 5/7/74, effective 6/6/74.]

AMENDATORY SECTION (Amending WSR 16-09-085, filed 4/19/16, effective 5/20/16)

WAC 296-155-790 Removal of materials through floor openings.

Any openings cut in a floor for the disposal of materials must be no larger in size than 25% of the aggregate of the total floor area, unless the lateral supports of the removed flooring remain in place. Floors weakened or otherwise made unsafe by demolition operations must be shored to carry ((safely)) the intended imposed load from demolition operations.

[Statutory Authority: RCW 49.17.010, 49.17.040, 49.17.050, 49.17.060. WSR 16-09-085, § 296-155-790, filed 4/19/16, effective 5/20/16; Order 74-26, § 296-155-790, filed 5/7/74, effective 6/6/74.]

AMENDATORY SECTION (Amending WSR 16-09-085, filed 4/19/16, effective 5/20/16)

WAC 296-155-795 Removal of walls, masonry sections, and chimneys. (1) You must not permit masonry walls, or other sections of masonry, to fall upon the floors of the building in such masses as to exceed the safe carrying capacities of the floors.

(2) You must not permit any wall section, which is more than one story in height, to stand alone without lateral bracing, unless such wall was originally designed and constructed to stand without such lateral support, and is in a condition safe enough to be self-supporting. You must leave all walls in a stable condition at the end of each shift.

(3) You must not permit employees to work on the top of a wall when weather conditions constitute a hazard.

(4) You must not cut or remove structural or load-supporting members on any floor until all stories above such a floor have been demolished and removed. This provision must not prohibit the cutting of floor beams for the disposal of materials or for the installation of equipment, provided that the requirements of WAC 296-155-790 and 296-155-800 are met.

(5) You must plank solid floor openings within 10 feet of any wall being demolished, except when employees are kept out of the area below.

(6) In buildings of "skeleton-steel" construction, the steel framing may be left in place during the demolition of masonry. Where this is done, you must clear all steel beams, girders, and similar structural supports of all loose material as the masonry demolition progresses downward.

(7) You must provide walkways or ladders to enable employees to safely reach or leave any scaffold or wall.

(8) You must not demolish walls, which serve as retaining walls to support earth or adjoining structures, until such earth has been properly braced or adjoining structures have been properly underpinned.

(9) You must not use walls (~~(, which are to serve)~~) as retaining walls against which debris will be piled, unless such walls are capable of ((safely)) supporting the imposed load.

[Statutory Authority: RCW 49.17.010, 49.17.040, 49.17.050, 49.17.060. WSR 16-09-085, § 296-155-795, filed 4/19/16, effective 5/20/16; Order 74-26, § 296-155-795, filed 5/7/74, effective 6/6/74.]

AMENDATORY SECTION (Amending WSR 16-09-085, filed 4/19/16, effective 5/20/16)

WAC 296-155-810 Catch platforms. (1) During the demolition of the exterior walls of a structure originally more than 70 feet high, you must erect catch platforms along the exterior faces of such walls where necessary to prevent injury to persons working below.

(2) You must construct and maintain such catch platforms not more than 3 stories below the story from which the exterior walls are being removed, until the demolition has progressed to within 3 stories of the ground level.

(3) Catch platforms must not be less than 5 feet in width measured in a horizontal distance from the face of the structure and constructed of outriggers and planks. You must lay planks tight together and without openings between the planks and the wall.

Note: Catch platforms may be constructed of other approved materials of equal strength and security against falling material.

(4) Catch platforms must ~~((be capable of sustaining a uniform live load of not less than 125 pounds per square foot))~~ meet the strength and stability requirements of supported scaffolds in chapter 296-874 WAC.

[Statutory Authority: RCW 49.17.010, 49.17.040, 49.17.050, 49.17.060. WSR 16-09-085, § 296-155-810, filed 4/19/16, effective 5/20/16; Order 74-26, § 296-155-810, filed 5/7/74, effective 6/6/74.]