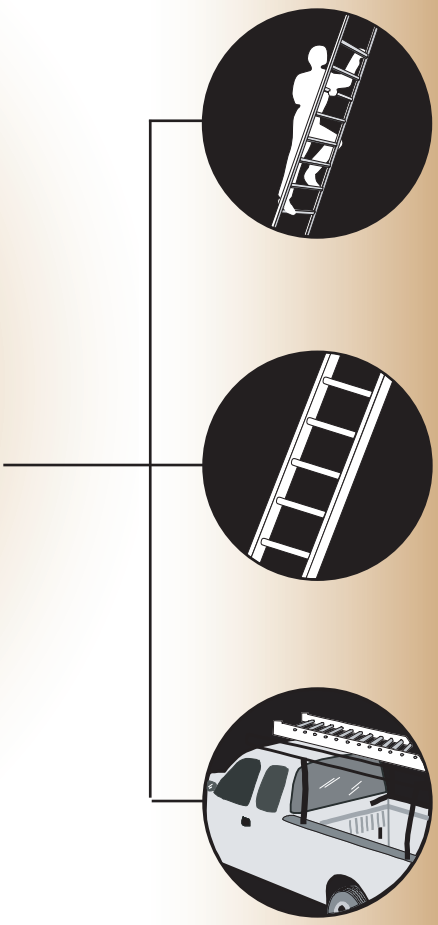
DOSH

Division of Occupational Safety and Health

Ladders, Portable and Fixed



Chapter 296-876 WAC

December 2006 Edition

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12/2006 printing

Department of LABOR AND INDUSTRIES

Standards Update to

Chapter 296-876 WAC, Ladders, Portable and Fixed

Issue Date 12/1/2006
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The Department of Labor and Industries has rewritten and reorganized for clarity and ease of use, the Ladder rules in chapters 296-24 WAC, 296-155 WAC and 296-800 WAC. These rules have been adopted and incorporated into Chapter 296-876 WAC, Ladders, Portable and Fixed.

- **Please discard WAC 296-24-780 through 296-24-79505 and WAC 296-24-810 through 296-24-81013.**
- **Please discard WAC 296-155-480 through 296-155-48090.**
- **Please discard WAC 296-800-290 through 296-800-29040.**

To receive future updates of this standard and all other Department of Labor and Industries safety and health standards electronically, please sign up on the WISHA Listserv (http://www.lni.wa.gov/Safety/Rules/default.htm). By subscribing to the Listserv, you will also receive rule updates, hearing notices, and informational packets for all safety and health rules.

Also available on the WISHA web site:

- WISHA Core Rules
- Other General WISHA Rules
- Industry and Task-specific Rules
- Proposed rules and hearings
- Newly adopted rules and new rule information
- WISHA Regional Directives (WRDs)
- WISHA Interim Operations and Interpretive Memoranda (WIIM)
- Memoranda of Understanding (MOU)

To receive hardcopy updates of this rule, please return the card located at the back of the book.

Ladders, Portable and Fixed

Chapter 296-876 WAC

Other Rules that may apply to your workplace

- The WISHA Safety and Health Core Rules, Chapter 296-800 WAC, contain the basic requirements that apply to most employers in Washington. They also contain:
  - An Introduction that lists important information you should know, including a section on building, fire and electrical codes.
  - A Resource section that includes a complete list of all WISHA rules and a directory of the Labor and Industries (L&I) offices.
- Other WISHA rules may apply to you, depending on the activities and operations of your workplace. Contact your local L&I office if you're uncertain about which WISHA requirements apply to you.
- To go online to access all the Safety and Health Rules: http://www.LNI.wa.gov/safety
- If you would like to receive e-mail notification of rule updates, please register for the Standards Listserv on the WISHA web site at http://www.lni.wa.gov/home/listservs.htm
- For a CD or paper copy contact us by:

Mail: Department of Labor and Industries
P.O. Box 44620
Olympia, WA 98504-4620

Telephone: 1-800-4BE-SAFE (1-800-423-7233)

Ladders, Portable and Fixed

Chapter 296-876 WAC

Quick Reference

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Quick Reference

1•800•4BE SAFE (1•800•423•7233)

Ladders, Portable and Fixed

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Ladders, Portable and Fixed

WAC 296-876-100

Scope

This chapter applies to portable and fixed ladders, including job-made wooden ladders.

Exemption:

- This chapter doesn't apply to:
  - Portable ladders used by the fire services for fire combat that are covered by Safety Standards for Fire Fighters, Chapter 296-305 WAC
    or
  - Agriculture activities covered by Safety Standards for Agriculture, Chapter 296-307 WAC.

Notes

Training

WAC 296-876-150

Section Contents

YOUR RESPONSIBILITY

To train employees who use ladders

TITLE **PAGE**

Training

WAC 296-876-150

Rule

WAC 296-876-15005

You must

- Train employees to recognize ladder hazards and the procedures to minimize these hazards.
- Have a competent person train employees that use ladders in at least the following topics:
  - The proper construction, use, placement, and care in handling ladders
  - The maximum intended load capacities of ladders that are used.
  - The requirements of this chapter.
- Retrain employees as necessary to make sure they know and understand the content of the original training.

Portable Ladders Design and Construction

WAC 296-876-200

Section Contents

YOUR RESPONSIBILITY:

To make sure portable ladders meet design and construction requirements

TITLE **PAGE**

Portable Ladders Design and Construction

WAC 296-876-200

Rule

WAC 296-876-20005

Design and construction

IMPORTANT:

Design and construction requirements of this section don't apply to special purpose ladders.

Definition:

A ***special purpose ladder*** is a portable ladder that's made by modifying or combining design or construction features of the general-purpose types of ladders in order to adapt the ladder to special or specific uses.

You must

- Make sure portable ladders and job-made wooden ladders manufactured **on or after January 1, 2006,** meet the design and construction requirements and specifications of the appropriate American National Standards Institute (ANSI) standard:
  - ANSI A14.1-2000, American National Standard for Ladders-Portable Wood Safety Requirements.
  - ANSI A14.2-2000, American National Standard for Ladders-Portable Metal Safety Requirements.
  - ANSI A14.5-2000, American National Standard for Ladders-Portable Reinforced Plastic-Safety Requirements.
  - ANSI A14.4-2002, American National Standard Safety Requirements for Job Made Wooden Ladders.

– Continued–

Portable Ladders Design and Construction

WAC 296-876-200

Rule

WAC 296-876-20005

Design and construction (continued)

You must

- Make sure portable ladders manufactured **before January 1, 2006,** meet the design and construction requirements and specifications of the appropriate ANSI standard in effect on the date of manufacture:
  - ANSI A14.1, American National Standard for Ladders-Portable Wood-Safety Requirements.
  - ANSI A14.2, American National Standard for Ladders-Portable Metal-Safety Requirements.
  - ANSI A14.5, American National Standard for Ladders-Portable Reinforced Plastic-Safety Requirements.

Note:

A commercially manufactured portable ladder should have a label indicating it meets the requirements of the ANSI standard. If in doubt, check with the manufacturer.

Helpful Tool:

Job-made Wooden Ladders

You can find information about the design and construction of job-made wooden ladders in the Resources section of this chapter.

Notes

Portable Ladders Care

WAC 296-876-300

Section Contents

YOUR RESPONSIBILITY:

To make sure portable ladders are inspected, maintained, stored and transported properly

TITLE **PAGE**

Portable Ladders Care

WAC 296-876-300

Rule

WAC 296-876-30005

Condition and inspection

You must

- Keep portable ladders in good, usable condition. Good, usable condition includes, but isn't limited to:
  - Joints between the steps or rungs and the side rails are tight.
  - Rungs, cleats, or steps aren't bent, broken, or missing.
  - Side rails aren't bent, broken, or split.
  - All bolts and rivets are in place and secure.
  - Hardware, fittings and accessories are securely attached and working properly.
  - Ropes aren't frayed or badly worn.
  - Moveable parts operate freely without binding or excessive play.
  - Safety feet and other auxiliary equipment aren't excessively worn.
  - Metal components aren't corroded.
  - There are no other faulty or defective components.
- Make sure wood ladders aren't coated with an opaque covering except for the minimum amount necessary for identification and warning information which may be placed on one face only of a side rail.
- Have a competent person inspect a ladder:
  - When required by Table 1, Ladder Inspection Criteria

    and
  - After any other occurrence that could affect safe use.
- Make sure any ladder with structural damage or other hazardous defect is:
  - Marked to identify it as defective or tagged with “don't use” or similar language

    and
  - Removed from service.

-Continued-

WAC 296-876-30005
Condition and inspection (continued)

Note:

Ladders subjected to certain acids or alkali materials may experience chemical corrosion and a reduction in strength.
Consult the manufacturer or a qualified person prior to use.

Table 1
Ladder Inspection Criteria

When the ladder is	Do the following
First placed into service and periodically while in service	• Inspect the ladder for visible defects, including, but not limited to: – Working parts **and** – Rung or step connections to the side rails
Damaged by impact or tips over	• Visually inspect the ladder for dents, bends, cracks or splits • Check: – Rung or step connection to the side rails – Hardware connections. – Rivets for shear damage. – All other components.
Exposed to excessive heat such as a fire	• Visually inspect the ladder for damage. • Test for deflection and strength characteristics using the “in-service use tests” contained in the appropriate ANSI. **Exemption:** Job-made wooden ladders aren't to be subjected to load or impact tests. Those tests may weaken lumber components or fasteners, causing hidden damage that could result in sudden failure during use.

Portable Ladders Care

WAC 296-876-300

Rule

WAC 296-876-30010

Repair

You must

- Make sure repairs restore the ladder to a condition meeting its original design criteria.
- Prohibit repairs to a defective side rail.

Note:

A commercially manufactured ladder with a defective side rail cannot be repaired by the user. Side rail repair can only be done by the manufacturer.

WAC 296-876-30015

Storage

You must

- Make sure material isn't put on ladders in storage.

Note:

- Store portable ladders on racks designed to protect them when not in use. The racks should have enough supporting points to prevent the ladder from sagging.
- Don't store wood ladders near sources of heat, moisture, or dampness.

Portable Ladders Care

WAC 296-876-300

Rule

WAC 296-876-30020

Transport

You must

- Properly support ladders while transporting them on vehicles.
- Make sure ladders transported in a truck rack are positively secured in a fixed position that prevents chafing or abrasion.

Note:

Securing the ladder to each support point will greatly reduce damage due to road shock.

Notes

Portable Ladders Use

WAC 296-876-400

Section Contents

YOUR RESPONSIBILITY:

To use portable ladders safely

TITLE **PAGE**

Portable Ladders Use

WAC 296-876-400

Rule

WAC 296-876-40005

Designed use

You must

- Use ladders only for their intended purpose.

Note:

Unless specifically recommended by the manufacturer, don't use a ladder as a:

- Brace
- Skid
- Lever
- Guy or gin pole
- Gangway
- Platform
- Scaffold plank
- Material hoist

-Continued-

WAC 296-876-40005
Designed use (continued)

You must

- Make sure not to overload ladders. Don't exceed either the:
  - Maximum intended load
    or
  - Manufacturer's rated capacity.

Definitions:

- The ***maximum intended load*** is the total load of all persons, equipment, tools, materials, transmitted loads, and other loads reasonably anticipated to be applied to a ladder or ladder component at any one time.
- ***Ladder type*** is the designation that identifies the maximum intended load (working load) of the ladder. Ladder types are as follows:

Duty Rating	Ladder Type	Use	Maximum Intended Load (Pounds)
Extra Heavy-Duty	IA	Industry, utilities, contractors	300
Heavy-Duty	I	Industry, utilities, contractors	250
Medium-Duty	II	Painters, offices, light maintenance	225
Light-Duty	III	General household use	200

Portable Ladders Use

WAC 296-876-400

Rule

WAC 296-876-40010

Workplace activities or traffic

You must

- Protect ladders that are set-up in a location where they could be displaced by workplace activities or traffic by either:
  - Securing the ladder to prevent accidental displacement
    or
  - Using a barricade to keep the activities or traffic away from the ladder.
- Protect ladders that are set-up in front of doors that open towards the ladder by doing at least one of the following:
  - Block the door open.
  - Lock the door.
  - Guard the door to keep it from opening into the ladder.

Portable Ladders Use

WAC 296-876-400

Rule

WAC 296-876-40015

Support

You must

- Place the ladder either:
  - With a secure footing on a firm, level support surface
    or
  - Secure the ladder to prevent accidental displacement.
- Make sure a ladder isn't placed on ice, snow, or other slippery surface unless the ladder is prevented from accidental displacement by either:
  - Securing it
    or
  - Providing the ladder with slip-resistant feet.

Note:

Slip-resistant feet aren't a substitute for care in placing, lashing, or holding a ladder that's used on a slippery surface.

You must

- Make sure ladders aren't placed on boxes, barrels, or other unstable bases to obtain additional height.
- Place a straight ladder so the side rails are equally supported by the top support, unless the ladder is equipped with a single support attachment.
- Make sure the top support of the ladder is reasonably rigid and able to support the load.

Portable Ladders Use

WAC 296-876-400

Rule

WAC 296-876-40020

Set-up

You must

- Set-up nonself-supporting ladders at a safe angle. The ladder is set at the proper angle when the horizontal distance from the top support to the foot of the ladder is approximately one-quarter the working length of the ladder.
- Set-up job-made ladders with spliced side rails so that the horizontal distance from the top support to the foot of the ladder isn't greater than one-eighth the working length of the ladder.

Definition:

The ***working length*** of a nonself-supporting ladder is the length, measured along the rails, from the base support point of the ladder to the point of bearing at the top.

-Continued-

Portable Ladders Use

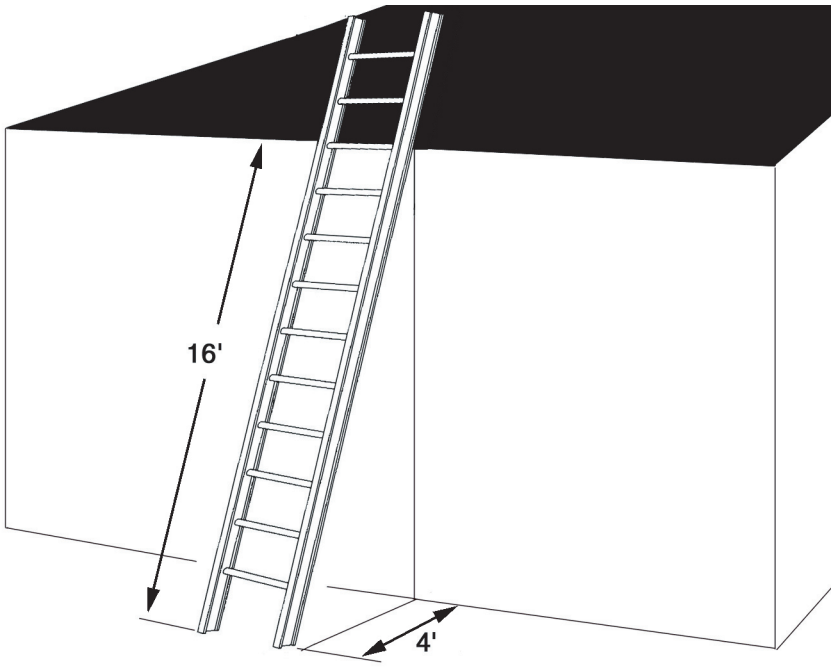
WAC 296-876-400

Rule

WAC 296-876-40020

Set-up (continued)

Safe Ladder Angle



Working length = 16'

Portable Ladders Use

WAC 296-876-400

Rule

WAC 296-876-40025

Climbing and descending

You must

- Have both hands free to hold on to the ladder.
- Face the ladder when climbing or descending.
- Keep ladders free of oil, grease, or other slippery materials.
- Keep the area around the top and bottom of ladders clear.
- Make sure single-rail ladders aren't used.

Definition:

A ***single-rail ladder*** is a portable ladder with crosspieces mounted on a single rail.

WAC 296-876-40030

Getting on and off ladders at upper levels

You must

- Make sure a ladder used to access an upper level has the side rails extended at least 3 feet (.9 m) above the landing surface if the ladder length permits.
- Do the following if a ladder used to access an upper level isn't long enough to obtain a 3-foot side rail extension above the landing surface:
  - Secure the ladder at the top to a rigid support that won't deflect.
  - Provide a grasping device, such as a grabrail, to assist in mounting and dismounting the ladder.
  - Make sure the ladder deflection under a load won't, by itself, cause it to slip off its support.
- Make sure, if 2 or more separate ladders are used to reach an elevated work area, that the ladders are offset with a platform or landing between them.

Exemption:

A platform or landing isn't required when a portable ladder is used to reach a fixed ladder on structures such as utility towers and billboards where the bottom of the fixed ladder is elevated to limit access.

Portable Ladders Use

WAC 296-876-400

Rule

WAC 296-876-40035

Exposed electrical hazards

You must

- Use ladders with nonconductive side rails where the ladder could contact uninsulated, energized electric lines or equipment.
  - Metal ladders or other ladders specifically designed to permit grounding or dissipation of static electricity may be used around high static electrical fields if all of the following are met:
    - Using nonconductive ladders would present a greater hazard than using conductive ladders.
    - Ladders are prominently marked and identified as being conductive.
    - Ladders are grounded when used near energized lines or equipment.

Note:

Examples of ladders with conductive side rails are metal ladders, and wood or reinforced plastic ladders with metal side rail reinforcement.

Portable Ladders Use

WAC 296-876-400

Rule

WAC 296-876-40040

Persons on ladders

You must

- Make sure a ladder isn't moved, shifted, or adjusted while anyone is on it.
- Secure the ladder at the top and bottom when working from it.
- Use a safety belt with a lanyard that's secured to the ladder when doing any work that:
  - Requires the use of both hands

    and

  - Is done from a ladder more than 25 feet above the ground or floor.
- Prohibit work being done from a ladder more than 25 feet above the ground or floor if the work requires wearing eye protection or a respirator.

Portable Ladders Use

WAC 296-876-400

Rule

WAC 296-876-40045

Multisection ladders

You must

- Make sure not to tie or fasten ladder sections together to make longer ladders unless:
  - The ladder manufacturer endorses this type of use

    and

  - You have hardware fittings specifically designed for this purpose.
- Make sure each section of a multisection ladder, when fully extended and locked in position to be used, overlaps the adjacent section as indicated in Table 2, Minimum Required Overlap for Extension Ladders.

Table 2

Minimum Required Overlap for Extension Ladders

If the ladder size (feet) is	Minimum required overlap for a two-section ladder is (feet)
Up to and including 36	3
Over 36 and up to and including 48	4
Over 48 and up to and including 60	5

Portable Ladders Use

WAC 296-876-400

Rule

WAC 296-876-40050

Self-supporting ladders

You must

- Make sure self-supporting ladders aren't used as single ladders or in the partially closed position.
- Make sure stepladders are fully opened with the spreaders locked.
- Make sure not to climb on the rear braces of a self-supporting ladder unless they are designed and recommended for that purpose by the manufacturer.
- Prohibit standing or stepping on the:
  - Top cap and top step of a step or trestle ladder.
  - Bucket or pail shelf of a self-supporting ladder.

Exemption:

The restriction against using the top step isn't applicable if it's 18 inches or more below the top cap.

Notes

Fixed Ladders Design and Construction

WAC 296-876-500

Section Contents

YOUR RESPONSIBILITY:

To make sure fixed ladders installed on or after December 1, 2006, meet design and construction requirements

TITLE **PAGE**

Fixed Ladders Design and Construction

WAC 296-876-500

Rule

WAC 296-876-50010

Design and construction--Fixed ladders installed on or after December 1, 2006

You must

- Make sure fixed ladders installed **on or after** December 1, 2006, meet the design and construction requirements of ANSI A14.3-2002, American National Standard for Ladders-Fixed-Safety Requirements.

Note:

Ladders will be considered to have met the requirements of this section if they meet the design and construction requirements of ANSI A14.3, American National Standard for Ladders-Fixed-Safety Requirements, in effect at the time they are installed.

Fixed Ladders Design and Construction

WAC 296-876-600

Section Contents

YOUR RESPONSIBILITY:

To make sure fixed ladders installed before December 1, 2006, meet design and construction requirements

TITLE **PAGE**

Fixed Ladders Design and Construction

WAC 296-876-600

Section Contents

Fixed Ladders Design and Construction

WAC 296-876-600

Rule

WAC 296-876-60005

Design and construction--Fixed ladders installed before December 1, 2006

You must

- Make sure fixed ladders installed **before** December 1, 2006, meet the requirements of WAC 296-876-60010 through 296-876-60080.

Note:

Ladders will be considered to have met the requirements of this section if they meet the design and construction requirements of ANSI A14.3, American National Standard for Ladders-Fixed-Safety Requirements, in effect at the time they are installed.

Fixed Ladders Design and Construction

WAC 296-876-600

Rule

WAC 296-876-60010

Design loads

You must

- Make sure each ladder is able to support, without failure, the total of the following loads:
  - At least 2 loads of 250 pounds each, concentrated between any 2 consecutive attachments.
  - Any additional concentrated loads of 250 pounds each determined from the anticipated use of the ladder.
  - Anticipated loads caused by all of the following that apply:
    - Ice buildup
    - Winds
    - Rigging attached to the ladder, including the load to be lifted
    - Impact loads resulting from the use of ladder safety devices
- Make sure the design of rails, supports, and fastenings includes:
  - Live loads to be supported by the ladder

    and

  - The weight of the ladder and everything attached to it.
- Consider all live loads to be concentrated at the point or points that will cause the maximum stress on the ladder or structural member.
- Make sure each step or rung is capable of supporting a single concentrated load of at least 250 pounds applied in the middle of the step or rung.
- Make sure the design stresses for wood components of ladders meet the requirements and specifications of ANSI A14.1, American National Standard for Ladders-Portable Wood-Safety Requirements, in effect when the ladder was installed.
- Make sure fastenings are designed to meet the ladder load requirements.

Fixed Ladders Design and Construction

WAC 296-876-600

Rule

WAC 296-876-60015

Pitch

You must

- Make sure the pitch of the ladder is no greater than 90 degrees from the horizontal.

Note:

- The preferred pitch of fixed ladders is within the range of 75 to 90 degrees from the horizontal. Ladders with a pitch range of 60 to 70 degrees from the horizontal are considered substandard and are only permitted if necessary to meet the installation requirements.
- Fixed stairs are an alternative for installations where a pitch angle of less than 60 degrees is necessary. See Fixed industrial stairs, WAC 296-24-765, in the General Safety and Health Standards, Chapter 296-24 WAC.

WAC 296-876-60020

Welding

You must

- Make sure welding meets the requirements of the ANSI A14.3, American National Standard for Ladders-Fixed-Safety Requirements, in effect at the time the ladder was installed.

Fixed Ladders Design and Construction

WAC 296-876-600

Rule

WAC 296-876-60025

Ladder surfaces

You must

- Make sure all parts and surfaces of the ladder are free of splinters, sharp edges, burrs, or projections that may be hazardous to persons using the ladder.

Fixed Ladders Design and Construction

WAC 296-876-600

Rule

WAC 296-876-60030

Rungs, cleats and steps

You must

- Make sure rungs have a minimum diameter as follows:
  - Rungs of wood ladders are at least $1\frac{1}{8}$ inches.
  - Rungs of metal ladders subject to unusually corrosive exposures, such as individual metal rungs imbedded in concrete which serve as access to pits and to other areas under floors, are at least one inch.
  - Rungs of all other metal ladders are at least $\frac{3}{4}$ inch.
- Make sure rungs, cleats, and steps are all of the following:
  - Parallel
  - Level
  - Uniformly spaced throughout the length of the ladder
  - Spaced so the distance from the centerline of one rung to the centerline of the next rung does not exceed 12 inches.

Exception:

The vertical distance from the ground, floor, or roof at the access level to the first rung may be adjusted within a range of 14 inches.

You must

- Make sure the minimum inside clear width of the stepping surface of rungs, steps, or cleats is 16 inches.
- Make sure individual rung or step-type ladders have rungs or steps that are shaped so that a person's foot cannot slide off the end.

Fixed Ladders Design and Construction

WAC 296-876-600

Rule

WAC 296-876-60035

Side rails

You must

- Make sure the shape of the side rail:
  - Provides an adequate gripping surface

    and
  - Is uniform throughout the length of climb.
- Make sure a side rail that has been spliced to obtain a longer length is at least equivalent in strength to a one-piece side rail made of the same material.

Fixed Ladders Design and Construction

WAC 296-876-600

Rule

WAC 296-876-60040

Clearances

You must

- Make sure ladders without wells or cages are at least 30 inches from the nearest permanent object on the climbing side, measured perpendicular to the ladder from the centerline of the rungs, cleats, or steps.

Exemption:

When unavoidable obstructions are encountered, the minimum perpendicular clearance between the centerline of the rungs, cleats, or steps and an obstruction on the climbing side may be reduced to 24 inches if a deflection device is installed to guide persons around the obstruction.

You must

- Make sure ladders without wells or cages have a clear width from the nearest permanent object on each side of the ladder of at least 15 inches, measured from the center of the rungs, cleats, or steps.
- Make sure the distance from the centerline of the rungs, cleats, or steps to the nearest permanent object in back of the ladder is at least 7 inches.

Exemption:

Fixed ladders in elevator pits may reduce the minimum clearance from the ladder to the nearest permanent object in back of the ladder to 4 ½ inches.

Fixed Ladders Design and Construction

WAC 296-876-600

Rule

WAC 296-876-60045

Step-across distance

You must

- Make sure a through ladder at the point of access or egress has a step-across distance, measured from the centerline of the steps or rungs to the nearest edge of the landing area, that is:
  - Not less than 7 inches

    or
  - Greater than 12 inches.
- Make sure a side-step ladder at the point of access or egress has a step-across distance, measured from the side rail of the ladder to the nearest edge of the landing area, that is:
  - Not less than 7 inches

    or
  - Greater than 12 inches.

Fixed Ladders Design and Construction

WAC 296-876-600

Rule

WAC 296-876-60050

Extensions and grab bars

You must

- Make sure the side rails of through or side-step ladders extend 42 inches above the top of the access level or landing platform.

Note:

- For a parapet ladder, the access level is:
  - The roof if the parapet is cut to permit passage through it

    or
  - The top of the parapet if it is continuous and uncut.

You must

- Make sure the extension of a through ladder above the access level or landing platform has:
  - Steps or rungs omitted from the extension

    and
  - Clearance between the side rails that is:
    - Not less than 24 inches

      or
    - Greater than 30 inches.

Exemption:

The maximum clearance between side rails of the extension may be increased to 36 inches if the ladder has a ladder safety device.

-Continued-

Fixed Ladders Design and Construction

WAC 296-876-600

Rule

WAC 296-876-60050

Extensions and grab bars (continued)

You must

- Make sure the side rails of through or side-step ladders extend 42 inches above the top of the access level or landing platform.
- Make sure side-step ladders have the steps or rungs and the side rails continuous in the extension.
- Make sure individual rung-step ladders are extended at least 42 inches above the access level or landing platform by:
  - Continuing the rung spacings as horizontal grab bars

    or
  - Providing vertical grab bars that have the same lateral spacing as the vertical legs of the rungs.

Exemption:

Extensions are not required for individual rung-step ladders with access openings through a manhole or hatch.

You must

- Make sure grab bars:
  - Are at least 4 inches from the nearest permanent object in back of the grab bar, measured from the centerline of the grab bar

    and
  - Do not extend beyond the rungs on the climbing side of the ladder.

Fixed Ladders Design and Construction

WAC 296-876-600

Rule

WAC 296-876-60055

Hatches

You must

- Make sure counterbalanced hatch covers open at least 70 degrees from the horizontal.
- Make sure the inside clear width of the hatch is a nominal 30 inches.
- Make sure the distance from the centerline of the rungs or cleats to the edge of the hatch opening on the climbing side, measured perpendicular to the ladder, is:
  - Not less than 24 inches

    or
  - Greater than 30 inches.
- Make sure hatches with clearance on the climbing side of the ladder that is between 24 and 27 inches are fitted with a deflector plate mounted at an angle of 60 degrees from the horizontal.

Note:

The springs or other counterbalance mechanisms for the hatch may project into the hatch opening provided they do not reduce clearance to less than 24 inches and a deflector plate is installed to guide persons around the obstruction.

Fixed Ladders Design and Construction

WAC 296-876-600

Rule

WAC 296-876-60060

Platforms

You must

- Make sure landing platforms for side-step ladders extend at least 30 inches on the climbing side of the ladder.
- Make sure landing platforms are:
  - At least 30 inches wide

    and
  - Equipped with standard railings and toeboards placed to allow safe access to the ladder.

Reference:

Requirements for standard railings and toeboards are in *Railing, toeboards, and cover specifications,* WAC 296-24-75011, the General Safety and Health Standards, Chapter 296-24 WAC.

You must

- Make sure the top rung or step of the ladder is level with the landing served by the ladder.
- Make sure the spacing from the landing platform to the first rung below the platform of a through ladder is the same as the rung spacing of the ladder.
- Make sure, if two or more separate ladders are used to reach an elevated work area, that the ladders are offset with a platform or landing between them.

Exemption:

A platform or landing is not required when a portable ladder is used to reach a fixed ladder on structures such as utility towers and billboards where the bottom of the fixed ladder is elevated to limit access.

Fixed Ladders Design and Construction

WAC 296-876-600

Rule

WAC 296-876-60065

Protective structures and equipment

You must

- Make sure a cage, well, or ladder safety system is provided if:
  - The length of climb is less than 24 feet

    and
  - The top of the ladder is more than 24 feet above the ground, floor, or roof.
- Make sure a ladder with a single length of climb that is equal to or greater than 24 feet is either:
  - Equipped with a ladder safety device

    or
  - Uses multiple ladder sections and meets all of the following:
    - Each section is provided with a cage or well.
    - The length of climb of any ladder section is not greater than 50 feet.
    - Each ladder section is offset from adjacent sections.
    - Landing platforms are provided at maximum intervals of 50 feet.

Exemption:

During construction activities, a self-retracting lifeline with landing platforms provided at maximum intervals of 150 feet may be used instead of a ladder safety device or multiple ladder sections.

Fixed Ladders Design and Construction

WAC 296-876-600

Rule

WAC 296-876-60070

Cages

You must

- Make sure the cage meets all of the following:
  - Extends at least 42 inches above the top of the platform or above the point of access and egress at the top of the ladder.
  - Has provisions for accessing and egressing the platform or the point of access or egress of the ladder.
  - There is at least 27 inches, but not more than 30 inches, from the cage to the centerline of the step or rung at all points except where the cage flares at the bottom of the ladder.
  - The cage is at least 27 inches wide.
  - There are no projections inside the cage.
- Make sure the bottom of the cage is:
  - At least 7 feet but not more than 8 feet above the point of access to the bottom of the ladder

    and
  - Flared at least 4 inches all around within the distance between the bottom horizontal band and the next higher band.
- Make sure vertical bars are:
  - Spaced at intervals of 9 ½ inches or less on center around the circumference of the cage

    and
  - Fastened to the inside of the horizontal bands.
- Make sure the horizontal bands meet all of the following:
  - The vertical intervals between horizontal bands is not more than 4 feet on center.
  - The horizontal bands of ladders with side rails are fastened to the side rails.
  - The horizontal bands of individual-rung ladders are fastened directly to the structure, building, or equipment.

Fixed Ladders Design and Construction

WAC 296-876-600

Rule

WAC 296-876-60075

Wells

You must

- Make sure there is at least 27 inches, but not more than 30 inches, from the centerline of the step or rung to the inside face of the well on the climbing side of the ladder.
- Make sure the inside clear width is at least 30 inches.
- Make sure the well:
  - Completely encircles the ladder

    and

  - Is free of projections.
- Make sure the bottom of the wall on the access side is at least 7 feet, but not more than 8 feet, above the point of access to the bottom of the ladder.

Fixed Ladder Design and Construction

WAC 296-876-600

Rule

WAC 296-876-60080

Ladder safety devices

You must

- Make sure ladder safety devices and related support systems meet all of the following:
  - Are capable of withstanding, without failure, the test drop of a 500 pound weight for a free-fall distance of 18 inches.
  - The device does not require a person to continually hold, push, or pull any part of the device and allows them to have both hands free to grip the ladder.
  - In the event of a fall, the device:
    - Is activated within 2 feet

      and
    - Limits the fall velocity to 7 feet per second or less.
  - Uses a connection between the carrier or lifeline and the point of attachment on the full body harness that is not longer than 9 inches.
- Make sure ladder safety devices with rigid carriers have mountings that:
  - Are attached at each end of the carrier

    and
  - Have intermediate mountings that are all of the following:
    - Spaced along the entire length of the carrier in accordance with the manufacturer's recommendations.
    - Installed within one foot below each splice on the carrier.
    - Have a maximum distance between mountings that is 25 feet or less.
- Make sure ladder safety devices with flexible carriers have:
  - Mountings that are attached at each end of the carrier

    and
  - Cable guides that are spaced at least 25 feet, but no further than 40 feet, apart along the entire length of the carrier.
- Make sure the design and installation of mountings and cable guides does not reduce the design strength of the ladder.

Fixed Ladders Inspection and Maintenance

WAC 296-876-700

Section Contents

YOUR RESPONSIBILITY:

To make sure fixed ladders are inspected and maintained properly

TITLE **PAGE**

Fixed Ladders Inspection and Maintenance

WAC 296-876-700

Rule

WAC 296-876-70005

Protection against corrosion and deterioration

You must

- Paint or otherwise treat metal ladders or metal parts to resist rust and corrosion if they are:
  - Exposed to the elements

    or
  - Located where rust or corrosion could be expected.
- Treat wood ladders used in conditions where decay may occur with a nonirritating preservative.
- Make sure wood ladders are not coated with an opaque covering except for the minimum amount necessary for identification and warning information which may be placed on one face only of a side rail.
- Treat the interface between different materials or use other means to prevent:
  - One material from damaging or having a harmful effect on another material

    and
  - Electrolytic action between dissimilar metals.

Fixed Ladders Inspection and Maintenance

WAC 296-876-700

Rule

WAC 296-876-70010

Inspection and repair

You must

- Keep ladders in safe condition.
- Have a competent person inspect a ladder for visual defects:
  - Periodically

    and
  - After any occurrence that could affect safe use.
- Make sure any ladder with structural damage or other hazardous defect is immediately removed from service.

Note:

- Structural damage includes, but is not limited to, any of the following:
  - Broken or missing rungs, cleats, or steps.
  - Broken or split rails.
  - Corroded components.
  - Bolts and welds missing or not secure.
- A ladder is considered to be removed from service if any of the following are done:
  - It is marked to identify it as defective.
  - It is tagged with “do not use” or similar language.
  - It is blocked so that it cannot be used, for example, by using a plywood attachment that spans several rungs.

You must

- Make sure repairs restore the ladder to a condition meeting its original design criteria.

Notes

Fixed Ladders Use

WAC 296-876-800

Contents

YOUR RESPONSIBILITY:

To use fixed ladders safely

TITLE **PAGE**

Fixed Ladders Use

WAC 296-876-800

Rule

WAC 296-876-80005

Designed load

You must

- Make sure not to overload ladders. Do not exceed either the:
  - Maximum intended load

    or
  - Manufacturer's rated capacity.

Definition:

The ***maximum intended load*** is the total load of all persons, equipment, tools, materials, transmitted loads, and other loads reasonably anticipated to be applied to a ladder or ladder component at any one time.

WAC 296-876-80010

Climbing and descending

You must

- Have both hands free to hold on to the ladder.
- Face the ladder when climbing or descending.
- Keep ladders free of oil, grease, or other slippery materials.

Ladders, Portable and Fixed

WAC 296-876-900

Definitions

Cage

An enclosure that encircles the climbing space of a fixed ladder. It is fastened to the ladder side rails or to the structure and may also be called a cage or basket guard.

Cleat

A ladder crosspiece used in climbing or descending. Also called a step or rung.

Equivalent

Alternative design, material or method to protect against a hazard. You have to demonstrate it provides an equal or greater degree of safety for employees than the method, material or design specified in the rule.

Extension ladder

A nonself-supporting portable ladder consisting of two or more sections. The sections travel in guides or brackets that allow the length of the ladder to be changed. The size is designated by the sum of the lengths of each section, measured along the side rails.

Failure

The ladder or ladder component loses the ability to carry the load, breaks, or separates into component parts.

Fastenings

A fastening is a device to attach a ladder to a structure, building, or equipment.

Fixed ladder

A ladder permanently attached to a structure, building, or equipment.

Grab bars

Handholds placed adjacent to or as an extension above ladders for the purpose of providing access beyond the limits of the ladder.

Ladders, Portable and Fixed

WAC 296-876-900

Definitions

Job-made ladder

A ladder that is made, not commercially manufactured, to fit a specific job situation. They are for temporary use until a particular phase of construction is completed or until permanent stairways or fixed ladders are ready to use.

Individual-rung/step ladder

A fixed ladder consisting of individual steps or rungs mounted directly to the side or wall of the structure, building, or equipment.

Ladder

A device having steps, rungs, or cleats that can be used to climb or descend.

Ladder safety device

Any device, other than a cage or well, designed to arrest the fall of a person using a fixed ladder.

Ladder type

The designation that identifies the maximum intended load (working load) of the ladder. Ladder types are as follows:

Duty Rating	Ladder Type	Use	Maximum Intended Load (Pounds)
Extra Heavy-Duty	IA	Industry, utilities, contractors	300
Heavy-Duty	I	Industry, utilities, contractors	250
Medium-Duty	II	Painters, offices, light maintenance	225
Light-Duty	III	General household use	200

Ladders, Portable and Fixed

WAC 296-876-900

Definitions

Landing

Any area such as the ground, roof, or platform that provides access or egress to a ladder.

Maximum intended load

The total load of all persons, equipment, tools, materials, transmitted loads, and other loads reasonably anticipated to be applied to a ladder or ladder component at any one time. Sometimes referred to as working load.

Pitch

The included angle between the horizontal and the ladder, measured on the opposite side of the ladder from the climbing side.

Portable ladder

A ladder that can be readily moved or carried.

Reinforced plastic

A plastic that has high-strength fillers embedded in the base resin to increase strength.

Reinforced plastic ladder

A ladder whose side rails are reinforced plastic. The crosspieces, hardware, and fasteners may be made of metal or other suitable material.

Rung

A ladder crosspiece used in climbing or descending. Also called a cleat or step.

Side-step ladder

A fixed ladder that requires a person to step to the side of the ladder side rails to reach the landing.

Single ladder

A nonself-supporting portable ladder, nonadjustable in length, consisting of one section. The size is designated by the overall length of the side rail.

Ladders, Portable and Fixed

WAC 296-876-900

Definitions

Single-rail ladder

A portable ladder with crosspieces mounted on a single rail. Single-rail ladders are prohibited from use.

Special-purpose ladder

A portable ladder that is made by modifying or combining design or construction features of the general-purpose types of ladders in order to adapt the ladder to special or specific uses.

Step

A ladder crosspiece used in climbing or descending. Also called a cleat or rung.

Stepladder

A self-supporting portable ladder, nonadjustable in length, with flat steps and hinged at the top. The size is designated by the overall length of the ladder measured along the front edge of the side rails.

Through ladder

A fixed ladder that requires a person to step between the side rails of the ladder to reach the landing.

Trestle ladder

A self-supporting portable ladder, nonadjustable in length, consisting of two sections hinged at the top to form equal angles with the base. The size is designated by the length of the side rails measured along the front edge.

Well

A walled enclosure around a fixed ladder that provides a person climbing the ladder with the same protection as a cage.

Working length

The length of a nonself-supporting ladder, measured along the rails, from the base support point of the ladder to the point of bearing at the top.

Ladders, Portable and Fixed

Chapter 296-876 WAC

Resources

HELPFUL TOOLS

Notes

Job-Made Wooden Ladders Design and Construction

Use with Ladders, Portable and Fixed, Chapter 296-876 WAC

This Helpful Tool provides information concerning the design and construction of job-made wooden ladders. Ladders that are built according to these specifications will be considered to meet the requirements of Design and Construction, WAC 296-876-20005.

GENERAL REQUIREMENTS

- All ladder component surfaces are finished to avoid injury to employees and to prevent snagging of clothing.
- Working length isn't greater than 24 feet.
- Fasteners are driven full length and countersunk not more than 1/8 inch.

Note:

Fasteners include plain-shank and helically-threaded steel nails. Staples and wood screws of equivalent shank withdrawal, head pull-through, and bending/shear resistance (as determined by test data or published formulas and tabulated values) may also be used.

Definition:

Equivalent means an alternative design, material or method to protect against a hazard. You have to demonstrate it provides an equal or greater degree of safety for employees than the method, material or design specified in the rule.

-Continued-

Job-Made Wooden Ladders Design and Construction

Use with Ladders, Portable and Fixed, Chapter 296-876 WAC

MATERIALS

- Wood parts are seasoned to moisture content of not more than 19 percent.
- Side rails and cleats are made from stress-grade lumber that meets the minimum grades shown in Table HT-1, Accessible stress-grade lumber for job-made ladders.
- Cleats are nominal 2x4 stress-grade dimension lumber.
- Material used for side rails meets the minimum dimensions of:
  - Table HT-2, Minimum Rail Size for Single-Cleat Ladders
    or
  - Table HT-3, Minimum Rail Size for Double-Cleat Ladders

Note:

Minimum dimensions for side rails are based on the ladder being set-up at the proper angle. See Set-up, WAC 296-876-40020.

Definitions:

- ***Double-cleat ladder*** is a job-made ladder with two side rails and a center rail connected with continuous cleats. It allows personnel to climb and descend at the same time.
- ***Single-cleat ladder*** is a ladder consisting of a pair of side rails connected by cleats, rungs, or steps.
- ***Stress-grade lumber*** is lumber that has been assigned allowable stress (allowable stress design) or reference strengths (load resistance factor design) values. It is identified by the grademark or certificate of inspection issued by a lumber inspection bureau or agency accredited by the Board of Review of the American Lumber Standard Committee. The grademark specifies the grade, species, and dryness of the lumber.

-Continued-

Job-Made Wooden Ladders Design and Construction

Use with Ladders, Portable and Fixed, Chapter 296-876 WAC

SIDE RAILS

- The minimum clear distance between rails is:
  - Uniform throughout the length of climb
    and
  - At least:
    - 16 inches but not greater than 20 inches for single-cleat ladders
    - 18 inches but not greater than 22 inches for double-cleat ladders
- If splicing is required to obtain the necessary ladder length, the resulting side rail:
  - Doesn't have more than one splice, located as close to the top point of bearing as possible
    and
  - Is equivalent in strength to a one-piece side rail made of the same material
- Side rails, if required, are spliced using bolts with a nut and lock washer below the nut. Bolts are either:
  - Common steel bolts with a one inch diameter, $\frac{3}{32}$ inch thick steel washer under the bolt head
    or
  - ½ inch diameter carriage bolts

-Continued-

Job-Made Wooden Ladders Design and Construction

Use with Ladders, Portable and Fixed, Chapter 296-876 WAC

CLEATS

- Cleats are:
  - Parallel and level when the ladder is in position to be used
    and
  - Evenly spaced throughout the length of the ladder from the base to the top point of bearing.
- The distance from the top of a cleat to the top of an adjacent cleat is at least 8 inches but not greater than 12 inches.
- Cleats on double-cleat ladders are continuous and extend the full width of the ladder.

ATTACHING CLEATS

- Cleats are attached to the narrow face of each side rail by three 3¼ inch long 12-d common nails, or an equivalent set of fasteners.
- Filler blocks are used between cleats. Side rails aren't cut to inset cleats.
- Filler blocks are:
  - The same thickness as the cleats
  - Butted tightly against the underside of each cleat
  - Attached to the side rails by three 3 ¼ inch long 12-d common nails, or an equivalent set of fasteners.

-Continued-

Job-Made Wooden Ladders Design and Construction

Use with Ladders, Portable and Fixed, Chapter 296-876 WAC

Table HT-1

Acceptable Stress-Grade Lumber for Job-Made Ladders

Species for Visual Grades and Machine Grading Acronyms	Minimum Grade
Aspen	Select Structural
Beech-Birch-Hickory	No. 2
Cottonwood	Select Structural
Douglas Fir-Larch	No. 2
Douglas Fir-Larch (north)	No. 1/No. 2
Douglas Fir-Larch (south)	No. 2
Eastern Hemlock-Tamarack	Select Structural
Eastern Softwoods	Select Structural
Eastern White Pine	Select Structural
Hem-Fir	No. 2
Hem-Fir (north)	No.1/No. 2
Mixed Maple	Select Structural
Mixed Oak	No. 2
Northern Red Oak	No. 2
Northern Species	Select Structural
Red Maple	No. 2
Red Oak	No. 2
Redwood	No. 1
Spruce-Pine-Fir	No. 1/No. 2
Spruce-Pine-Fir (south)	No. 1
Southern Pine	No. 2 (nondense)
Western Cedars	Select Structural
Western Woods	Select Structural
White Oak	No. 2
Yellow Popular	Select Structural
MSR	1200f-1.2E
MEL	M-7

Note: The allowable stress in bending after adjustment for size, F_b, shall not be less than 1200 psi (pound-force per square inch) and the corresponding reference strength (for Load and Resistance Factor Design) shall not be less than 3.05 ksi (kips-force per square inch)

-Continued-

Job-Made Wooden Ladders Design and Construction

Use with Ladders, Portable and Fixed, Chapter 296-876 WAC

Table HT-2
Minimum Rail Size for Single-Cleat Ladders
(Nominal-Dimension Lumber)

Working Length (feet)	Spliced Side Rail	Continuous Side Rail
12 or less	2 x 4	2 x 4
14	2 x 4	2 x 4
16	2 x 4	2 x 6
18	2 x 4	2 x 6
20	2 x 6	2 x 6
22	2 x 6	2 x 6
24	2 x 6	2 x6

Table HT-3
Minimum Rail Size for Double-Cleat Ladders
(Nominal-Dimension Lumber)

Working Length (feet)	Spliced Side Rail	Continuous Side Rail
12 or less	2 x 4	2 x 4
14	2 x 4	2 x 6
16	2 x 6	2 x 6
18	2 x 6	2 x 6
20	2 x 6	Stresses exceed capacity of 2 x 6 rails
22	2 x 6	
24	2 x 6	

Ladders, Portable and Fixed

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Ladders, Portable and Fixed

Chapter 296-876 WAC

Statutory Authority

296-876-100 Scope.
[Statutory Authority: RCW 49.17.010, .040, .050, and .060. 06-16-020 (Order 06-10), § 296-876-100, filed 06/24/06, effective 12/01/06.]

296-876-150 Training.
[Statutory Authority: RCW 49.17.010, .040, .050, and .060. 06-16-020 (Order 06-10), § 296-876-150, filed 06/24/06, effective 12/01/06.]

296-876-15005 Training.
[Statutory Authority: RCW 49.17.010, .040, .050, and .060. 06-16-020 (Order 06-10), § 296-876-15005, filed 06/24/06, effective 12/01/06.]

296-876-200 Design and construction.
[Statutory Authority: RCW 49.17.010, .040, .050, and .060. 06-16-020 (Order 06-10), § 296-876-200, filed 06/24/06, effective 12/01/06.]

296-876-20005 Design and construction.
[Statutory Authority: RCW 49.17.010, .040, .050, and .060. 06-16-020 (Order 06-10), § 296-876-20005, filed 06/24/06, effective 12/01/06.]

296-876-300 Ladder care.
[Statutory Authority: RCW 49.17.010, .040, .050, and .060. 06-16-020 (Order 06-10), § 296-876-300, filed 06/24/06, effective 12/01/06.]

296-876-30005 Condition and inspection.
[Statutory Authority: RCW 49.17.010, .040, .050, and .060. 06-16-020 (Order 06-10), § 296-876-30005, filed 06/24/06, effective 12/01/06.]

296-876-30010 Repair.
[Statutory Authority: RCW 49.17.010, .040, .050, and .060. 06-16-020 (Order 06-10), § 296-876-30010, filed 06/24/06, effective 12/01/06.]

296-876-30015 Storage.
[Statutory Authority: RCW 49.17.010, .040, .050, and .060. 06-16-020 (Order 06-10), § 296-876-30015, filed 06/24/06, effective 12/01/06.]

296-876-30020 Transport.
[Statutory Authority: RCW 49.17.010, .040, .050, and .060. 06-16-020 (Order 06-10), § 296-876-30020, filed 06/24/06, effective 12/01/06.]

296-876-400 Use.
[Statutory Authority: RCW 49.17.010, .040, .050, and .060. 06-16-020 (Order 06-10), § 296-876-400, filed 06/24/06, effective 12/01/06.]

Ladders, Portable and Fixed

Chapter 296-876 WAC

Statutory Authority

296-876-40005 Designed use.

[Statutory Authority: RCW 49.17.010, .040, .050, and .060. 06-16-020 (Order 06-10), § 296-876-40005, filed 06/24/06, effective 12/01/06.]

296-876-40010 Workplace activities or traffic.

[Statutory Authority: RCW 49.17.010, .040, .050, and .060. 06-16-020 (Order 06-10), § 296-876-40010, filed 06/24/06, effective 12/01/06.]

296-876-40015 Support.

[Statutory Authority: RCW 49.17.010, .040, .050, and .060. 06-16-020 (Order 06-10), § 296-876-40015, filed 06/24/06, effective 12/01/06.]

296-876-40020 Set-up.

[Statutory Authority: RCW 49.17.010, .040, .050, and .060. 06-16-020 (Order 06-10), § 296-876-40020, filed 06/24/06, effective 12/01/06.]

296-876-40025 Climbing and descending.

[Statutory Authority: RCW 49.17.010, .040, .050, and .060. 06-16-020 (Order 06-10), § 296-876-40025, filed 06/24/06, effective 12/01/06.]

296-876-40030 Getting on and off ladders ata upper levels.

[Statutory Authority: RCW 49.17.010, .040, .050, and .060. 06-16-020 (Order 06-10), § 296-876-40030, filed 06/24/06, effective 12/01/06.]

296-876-40035 Exposed electrical hazards.

[Statutory Authority: RCW 49.17.010, .040, .050, and .060. 06-16-020 (Order 06-10), § 296-876-40035, filed 06/24/06, effective 12/01/06.]

296-876-40040 Persons on ladders.

[Statutory Authority: RCW 49.17.010, .040, .050, and .060. 06-16-020 (Order 06-10), § 296-876-40040, filed 06/24/06, effective 12/01/06.]

296-876-40050 Self-supporting ladders.

[Statutory Authority: RCW 49.17.010, .040, .050, and .060. 06-16-020 (Order 06-10), § 296-876-40050, filed 06/24/06, effective 12/01/06.]

Ladders, Portable and Fixed

Chapter 296-876 WAC

Statutory Authority

296-876-500 Fixed ladder design and construction.

[Statutory Authority: RCW 49.17.010, .040, .050, and .060. 06-16-020 (Order 06-10), § 296-876-500, filed 06/24/06, effective 12/01/06.]

296-876-50005 Design and construction. Fixed ladders installed on or after December 1, 2006.

[Statutory Authority: RCW 49.17.010, .040, .050, and .060. 06-16-020 (Order 06-10), § 296-876-50005, filed 06/24/06, effective 12/01/06.]

296-876-600 Fixed ladder design and construction.

[Statutory Authority: RCW 49.17.010, .040, .050, and .060. 06-16-020 (Order 06-10), § 296-876-600, filed 06/24/06, effective 12/01/06.]

296-876-60005 Design and construction. Fixed ladders installed before December 1, 2006.

[Statutory Authority: RCW 49.17.010, .040, .050, and .060. 06-16-020 (Order 06-10), § 296-876-60005, filed 06/24/06, effective 12/01/06.]

296-876-60010 Design loads.

[Statutory Authority: RCW 49.17.010, .040, .050, and .060. 06-16-020 (Order 06-10), § 296-876-60010, filed 06/24/06, effective 12/01/06.]

296-876-60015 Pitch.

[Statutory Authority: RCW 49.17.010, .040, .050, and .060. 06-16-020 (Order 06-10), § 296-876-60015, filed 06/24/06, effective 12/01/06.]

296-876-60020 Welding.

[Statutory Authority: RCW 49.17.010, .040, .050, and .060. 06-16-020 (Order 06-10), § 296-876-60020, filed 06/24/06, effective 12/01/06.]

296-876-60025 Ladder surfaces.

[Statutory Authority: RCW 49.17.010, .040, .050, and .060. 06-16-020 (Order 06-10), § 296-876-60025, filed 06/24/06, effective 12/01/06.]

296-876-60030 Rungs, cleats and steps.

[Statutory Authority: RCW 49.17.010, .040, .050, and .060. 06-16-020 (Order 06-10), § 296-876-60030, filed 06/24/06, effective 12/01/06.]

296-876-60035 Side rails.

[Statutory Authority: RCW 49.17.010, .040, .050, and .060. 06-16-020 (Order 06-10), § 296-876-60035, filed 06/24/06, effective 12/01/06.]

Ladders, Portable and Fixed

Chapter 296-876 WAC

Statutory Authority

296-876-60040 Clearances.

[Statutory Authority: RCW 49.17.010, .040, .050, and .060. 06-16-020 (Order 06-10), § 296-876-60040, filed 06/24/06, effective 12/01/06.]

296-876-60045 Step-across distance.

[Statutory Authority: RCW 49.17.010, .040, .050, and .060. 06-16-020 (Order 06-10), § 296-876-60045, filed 06/24/06, effective 12/01/06.]

296-876-60050 Extensions and grab bars.

[Statutory Authority: RCW 49.17.010, .040, .050, and .060. 06-16-020 (Order 06-10), § 296-876-60050, filed 06/24/06, effective 12/01/06.]

296-876-60055 Hatches.

[Statutory Authority: RCW 49.17.010, .040, .050, and .060. 06-16-020 (Order 06-10), § 296-876-60055, filed 06/24/06, effective 12/01/06.]

296-876-60060 Platforms.

[Statutory Authority: RCW 49.17.010, .040, .050, and .060. 06-16-020 (Order 06-10), § 296-876-60060, filed 06/24/06, effective 12/01/06.]

296-876-60065 Protective structures and equipment.

[Statutory Authority: RCW 49.17.010, .040, .050, and .060. 06-16-020 (Order 06-10), § 296-876-60065, filed 06/24/06, effective 12/01/06.]

296-876-60070 Cages.

[Statutory Authority: RCW 49.17.010, .040, .050, and .060. 06-16-020 (Order 06-10), § 296-876-60070, filed 06/24/06, effective 12/01/06.]

296-876-60075 Wells.

[Statutory Authority: RCW 49.17.010, .040, .050, and .060. 06-16-020 (Order 06-10), § 296-876-60075, filed 06/24/06, effective 12/01/06.]

296-876-60080 Ladder safety devices.

[Statutory Authority: RCW 49.17.010, .040, .050, and .060. 06-16-020 (Order 06-10), § 296-876-60035, filed 06/24/06, effective 12/01/06.]

Ladders, Portable and Fixed

Chapter 296-876 WAC

Statutory Authority

296-876-700 Fixed ladders inspection and maintenance.
[Statutory Authority: RCW 49.17.010, .040, .050, and .060. 06-16-020 (Order 06-10), § 296-876-700, filed 06/24/06, effective 12/01/06.]

296-876-70005 Protection against corrosion and deterioration.
[Statutory Authority: RCW 49.17.010, .040, .050, and .060. 06-16-020 (Order 06-10), § 296-876-70005, filed 06/24/06, effective 12/01/06.]

296-876-70010 Inspection and repair.
[Statutory Authority: RCW 49.17.010, .040, .050, and .060. 06-16-020 (Order 06-10), § 296-876-70010, filed 06/24/06, effective 12/01/06.]

296-876-800 Fixed ladder use.
[Statutory Authority: RCW 49.17.010, .040, .050, and .060. 06-16-020 (Order 06-10), § 296-876-800, filed 06/24/06, effective 12/01/06.]

296-876-80005 Designed load.
[Statutory Authority: RCW 49.17.010, .040, .050, and .060. 06-16-020 (Order 06-10), § 296-876-80005, filed 06/24/06, effective 12/01/06.]

296-876-80010 Climbing and descending.
[Statutory Authority: RCW 49.17.010, .040, .050, and .060. 06-16-020 (Order 06-10), § 296-876-80010, filed 06/24/06, effective 12/01/06.]

296-876-900 Definitions.
[Statutory Authority: RCW 49.17.010, .040, .050, and .060. 06-16-020 (Order 06-10), § 296-876-900, filed 06/24/06, effective 12/01/06.]