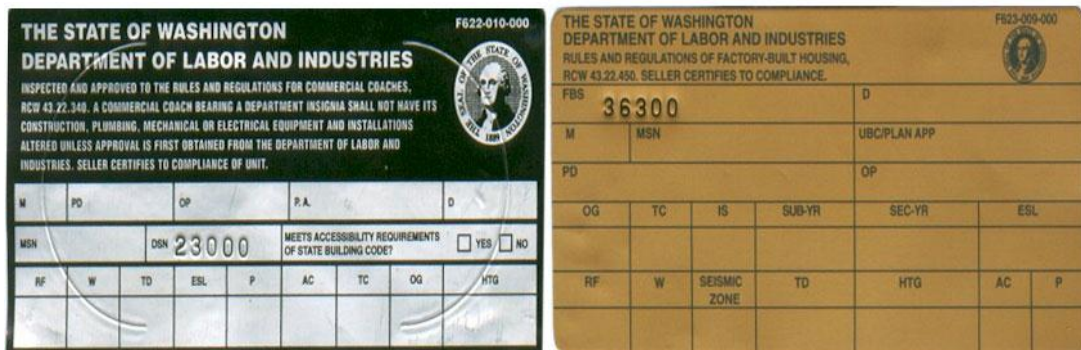


## AIRPORT BUILDING DEPARTMENT (ABD)

### Construction Trailers

**A permit is required for any construction trailer or structure (See exemptions from permit below)**

1. To begin the permit process, please complete a building permit application and, if applicable, a mechanical/plumbing permit application and submit to the Airport Building Department, with following:
  - a. 2 plot plans that show the location of the trailer relative to other buildings and structures and property lines.
  - b. 2 copies of trailer installation instructions which should include tie downs & skirting and access panel(s) to the under floor area.
  - c. 2 copies of drawings that indicate how access to and egress from the structure is provided.
    - i. For occupant loads 49 or less, a code compliant landing & stairway, or ramp is required.
    - ii. For occupant loads of 50 or more, a minimum of 2 exits are required. At least one of the two exits **shall** have a code compliant ramp (see attached typical ramp details).
    - iii. A minimum of one code compliant access ramp is required if the intended use of the trailer is **outside of general operational purposes traditionally conducted within a construction site trailer** (i.e. a ramp is required if the trailer will be used to hold owner's meetings, preconstruction meetings, etc), **and/or the trailer is connected to plumbing utilities**.
2. The trailer/structure must bear a Washington State black or gold insignia similar to the images below:



<http://www.lni.wa.gov/TradesLicensing>

### Construction Trailers Exempt from Permit:

#### Trailers located on associated construction site and:

1. The trailer has no sewer or water connection. Power connected from a temporary power pole is permitted.
2. The trailer is not intended to hold meetings where outside personnel will be attending (owner's meetings, preconstruction meetings are examples of outside personnel).

**Note: The trailer must be removed once the construction project is complete.**

#### Trailers located off the construction site and:

1. Trailer will be in place less than 6 months.
2. The trailer has no sewer or water connection. Connecting power is permitted.
3. The trailer is not intended to hold meetings where outside personnel will be attending (owner's meetings, preconstruction meetings are examples of outside personnel).

**Note: A letter stipulating the time, duration, and use of the construction trailer must be provided to ABD for this exception to be granted.**

## CODE COMPLIANT STAIR REQUIREMENTS:

**Handrails:** Handrails are required for both the stairway (if used) and ramp. They need to be placed within 34" to 38" above the walking surface and have to be 1-¼" to 2" in diameter or provide equivalent gripping surface (a 2 x 4 on edge is not acceptable). The handrail must extend horizontally at least 12" beyond the top riser & one tread depth beyond the bottom riser.

**Riser height and tread depth:** Stair riser heights shall be 7 inches (178 mm) maximum and 4 inches (102 mm) minimum. The riser height shall be measured vertically between the nosing of adjacent treads. Rectangular tread depths shall be 11 inches (279 mm) minimum measured horizontally between the vertical planes of the foremost projection of adjacent treads and at a right angle to the tread's nosing.

**Dimensional uniformity:** Stair treads and risers shall be of uniform size and shape. The tolerance between the largest and smallest riser height or between the largest and smallest tread depth shall not exceed 3 /8 inch (9.5 mm) in any flight of stairs. The greatest winder tread depth at the walk-line within any flight of stairs shall not exceed the smallest by more than 3 /8 inch (9.5 mm).

*Exception: Where the bottom or top riser adjoins a sloping public way, walkway or driveway having an established grade and serving as a landing, the bottom or top riser is permitted to be reduced along the slope to less than 4 inches (102 mm) in height, with the variation in height of the bottom or top riser not to exceed one unit vertical in 12 units horizontal (8-percent slope) of stair width. The nosing or leading edges of treads at such non uniform height risers shall have a distinctive marking stripe, different from any other nosing marking provided on the stair flight. The distinctive marking stripe shall be visible in descent of the stair and shall have a slip-resistant surface. Marking stripes shall have a width of not less than 1 inch (25 mm) but not more than 2 inches (51 mm).*

**Landings at doors:** Landings shall have a width not less than the width of the stairway or the door, whichever is greater. Doors in the fully open position shall not reduce a required dimension by more than 7 inches (178 mm). Where a landing serves an occupant load of 50 or more, doors in any position shall not reduce the landing to less than one-half its required width. Landings shall have a length measured in the direction of travel of not less than 44 inches (1118 mm).

**Thresholds:** Thresholds at doorways shall not exceed 1/2 inch (19.1 mm) in height above the finished floor or landing. Raised thresholds and floor level changes greater than 1 /4 inch (6.4 mm) at doorways shall be beveled with a slope not greater than one unit vertical in two units horizontal (50-percent slope).

**Guards:** Guards shall be located along open-sided walking surfaces, stairs, ramps and landings that are located more than 30 inches (762 mm) measured vertically to the floor or grade below at any point within 36 inches (914 mm) horizontally to the edge of the open side.

The guard height shall be a minimum of 42" and has to have intermediate pickets spaced such that a 4" diameter object does not go through the pickets/railing. In areas that are not open to the public, guards shall not have openings that allow passage of a sphere 21 inches (533 mm) in diameter.

## **CODE COMPLIANT RAMP REQUIREMENTS:**

### **RAMPS**

- Ramp surfaces are stable, firm, and slip resistant.
- Exposed exterior ramps and their approaches are constructed to prevent the accumulation of water on walking surfaces.
- Ramps used as part of means of egress have a maximum slope of 1:12.
- The maximum rise for any run is 30 inches.
- Ramp cross slopes are not steeper than 1:48.
- Ramps may not be less than the required exit width, with a minimum dimension of 36" between the handrails for interior ramps, and 44" for exterior ramps.
- Headroom at all parts of the means of egress is not less than 80 inches.

### **RAMP AND LANDING EDGE PROTECTION**

- Any portion of the edge of a ramp with a slope greater than 1:20, or landing which is more than ½ inch above the adjacent grade or floor within 10 inches horizontally, requires edge protection.
- Edge protection is required on each side of ramp runs and at each side of ramp landings, by a curb or barrier or by extended floor surface. (An extended floor surface occurs when the surface of ramp or landing extends 12 inches minimum beyond the inside face of a railing.

#### **Exceptions:**

- Edge protection is not required on ramps not required to have handrails, provided they have flared sides complying with ICC/ANSI A117.1 2009 406.3 Sides of Curb Ramps.
- Edge protection is not required on sides of ramp serving an adjacent ramp run or stairway.
- Edge protection is not required on sides of ramp landings with vertical drop-off not more than ½ of an inch within 10 inches horizontally of the minimum landing area.

#### **Edge protection options:**

1. A curb or barrier is required that prevents passage of 4 inch sphere below the height of 4 inches.
2. Railings: When used, railings are required to have one of the following features:
  - a. An intermediate rail mounted 17-19 inches above the ramp or landing surface.
  - b. A guard complying with IBC 1013
  - c. The surface of the ramp or landing extends 12 inches beyond the inside face of the railing.

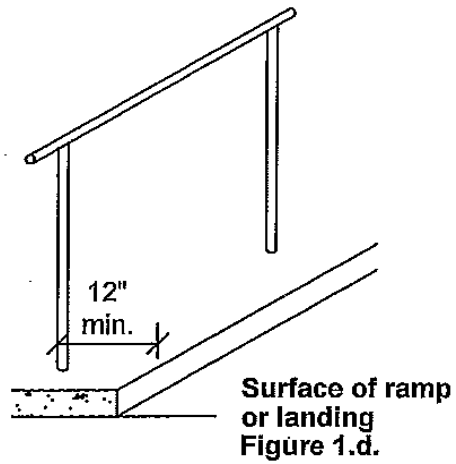
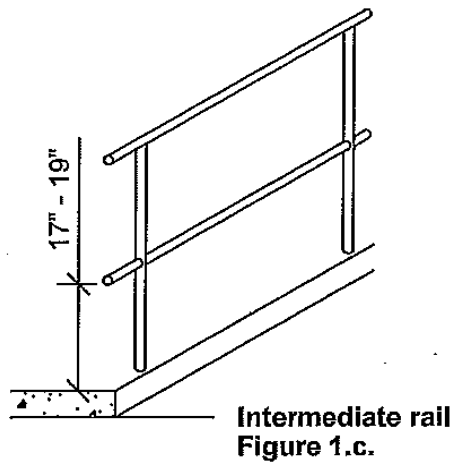
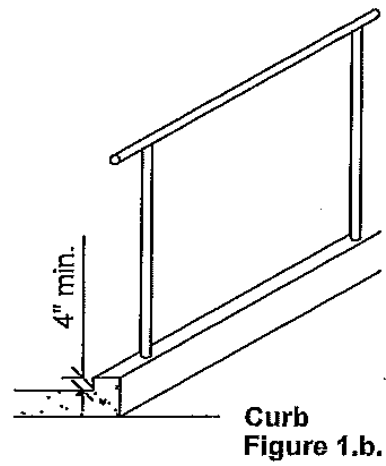
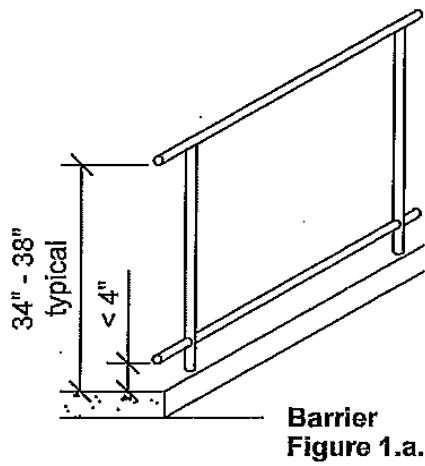
### **LANDINGS**

- Ramp surfaces are stable, firm and slip resistant.
- Exposed exterior ramps and their approaches are constructed to prevent the accumulation of water on walking surfaces.
- Ramps within the accessible route of travel shall have landings at the top and bottom, points of turning, entrance, exits and doors and at least one intermediate landing for each 30 inches of rise with a minimum dimension of 60 inches in the direction of the ramp run.
- Ramps that change direction at landings shall have landings sized to provide a 60 inch turning space (60 X 60 inches) or a T-shaped intersection 60 inches long by 36 inches wide (36 inches wide at each arm of T)
- The minimum width of the landing is as wide as the widest ramp leading to the landing.
- Landings shall not slope more than 1:48.
- Maneuvering clearances for doors can overlap the landing area where doorways are adjacent to the ramp.

### **HANDRAIL AND GUARD REQUIREMENTS**

- Ramps with a rise greater than 6 inches have handrails 34-38 inches in height.
- Handrails shall extend at least 12 inches beyond the top and bottom of any ramp run.
- Handrails are continuous except at points of access along the ramp.
- Provide guards for portions of landings or ramp that are more than 30 inches above adjacent grade.
- Guards shall be a minimum of 42 inches in height above the walking surface.

## Typical Ramp & Edge Protection and Landing Details



**EDGE PROTECTION**  
**Figure 1**

