Most porches and decks require Building Permits.

BUILDING PERMIT SUBMITTAL REQUIREMENTS:

- Site plan - Indicates where you plan to add the structure. Check land use setback requirements before beginning. Refer to Residential Setbacks and Development Standards Tip Sheet for setback requirements in the R-1 and R-2 Zoning Districts and allowed porch and deck projections into setbacks.
- Floor Framing plan – Show dimensions as well as joint and beam size and spacing.
- Roof Framing Plan (if applicable) – Specify roof coverings and attachment to house
- Elevation Drawings – Demonstrate what the finished structure will look like after it is built.
- Cross Section with Details – Connection to house, concrete footings, guardrails/stairs, etc.

STAIRS, HANDRAILS, AND GUARDS

New residential stairs shall meet the following standards:
- Maximum Rise: 7-3/4 inches
- Minimum Run (tread depth): 10 inches
- Minimum Width: 36 inches

Handrails must meet the following standards:
- Height (from tread nosing): 34-38 inches
- Diameter: 1-1/4-2 inches
- Spacing from wall: 1-1/2 inches min

A handrail is a rail fixed to posts or a wall for people to hold on to for support and must be provided on any set of four or more stairs. Handrails are generally only required on stairs.

Guards should be located along open-sided walking surfaces, including stairs, ramps and landings, that are located more than 30 inches measured vertically to the floor or grade below at any point within 36 inches horizontally to the edge of the open side. A guardrail is a rail that prevents people from falling off or being hit by something. Required guardrails must be at least 36 inches high. The guards shall have intermediate rails spaced such that a sphere 4 inches in diameter cannot pass through.
DECK CONNECTIONS AND TENSION TIES

Decks either need to be supported by an attachment to an exterior wall that meets Building Code requirements or they must be self-supporting. To meet Code requirements, the structure has to be designed to support both vertical and lateral loads.

- **Vertical loads** refer mainly to the structure’s ability to support the weight of the deck itself and the weight of anything on the deck, like people and/or furniture.
- **Lateral loads** refer mainly to the structure’s ability to sustain during seismic movement or wind pressure.

Where a lateral load connection is provided in accordance with the figure below, **hold-down tension devices** (i.e. “tension ties”) shall be installed in not less than two locations per deck, and each tension tie shall be designed to accommodate loads up to 1,500 pounds.

![Figure R507.2.1 of ICC Section R507](image)

**Joist Hanger:** Connects joists from both sides and provides bearing and uplift resistance.

**Post to Beam Caps:** Keeps beam secured to post to ensure direct bearing.

**Post Base:** Provides positive connection to footing, a lift above grade and lateral resistance.

**APPLICABLE REGULATIONS AND REFERENCES**

- Tacoma Municipal Code Section: **13.06 - Zoning, 13.06.602 - General Restrictions**
- Tacoma Municipal Code Section: **2.02 - Building Code**
- Washington Administrative Code 51-51-0507 Section: **R507 - Decks**
- International Code Council Section: **R507 - Decks**