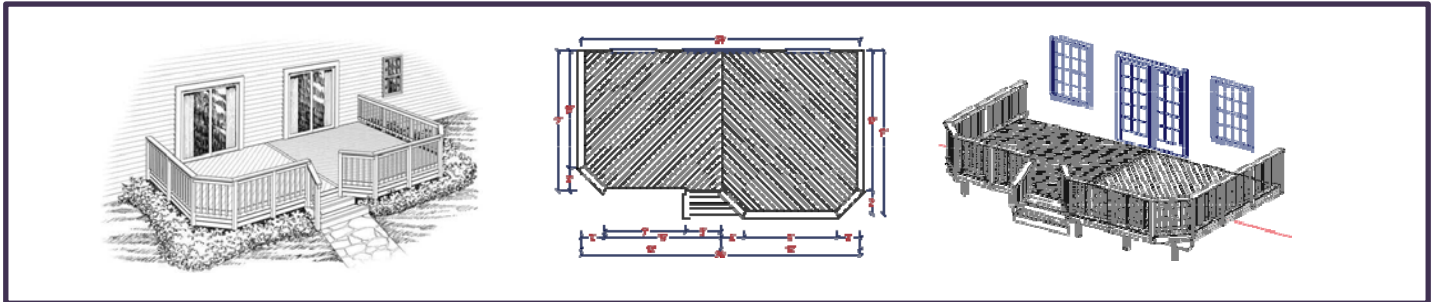


CONSTRUCTING RESIDENTIAL DECKS



DO I NEED A DECK PERMIT?

A building permit is required for the construction, replacement, relocation, addition or alteration of any deck or platform that has a roof, covers a basement or story below, or is more than 30" above grade, or is larger than 200 square feet (STC Title 12-01.090).

PERMIT FEES

Permit fees are based on valuation of the deck. You can provide a contractor's estimate with your building permit application or our staff will use a valuation to determine the deck value. Building permit fee estimates can be provided at the permit counter, over the phone at 360-466-7280, or via email at permits@swinomish.nsn.us.

HOW DO I KNOW MY PLANS ARE GOOD ENOUGH?

If this deck could be built by anyone who looks at your plans without any further information supplied by you, the plans are probably complete. When applying for a building permit, the following must accompany your application:

- A completed Building Permit Application signed by the property owner or the property owner's agent (usually the contractor).
- 2 copies of your site plan on 8 1/2" x 11" size paper or larger.
- 2 copies of your complete set of construction plans, which need to include the following.
 - **Plan View** (*from above*),
 - **Elevation View** (*from the side, front or both*),
 - **Section View** (*a view through the middle*),
 - **Framing Plan** (*shows foundation, beams, joists*),
 - **Roof Plan** (*if applicable*). Construction details including connections. Connections may be nails, but sometimes other hardware such as lag bolts may be necessary

GENERAL DECK CONSTRUCTION CODE REQUIREMENTS

(IRC Section R507)

LOADS AND CONNECTIONS

Decks and stairs must be designed for 40lb live load and 10lb dead load per square foot and braced to resist lateral movement.

MINIMUM UNIFORMLY DISTRIBUTED LIVE LOADS (IRC Table R301.5)	
USE (pounds per square foot)	LIVE LOAD
Decks *	40
Guardrails & Handrails **	200
Guardrails in-fill Components ***	200
Stairs	40 ****

* Refer to Section R502.2.1 for decks attached to exterior walls.

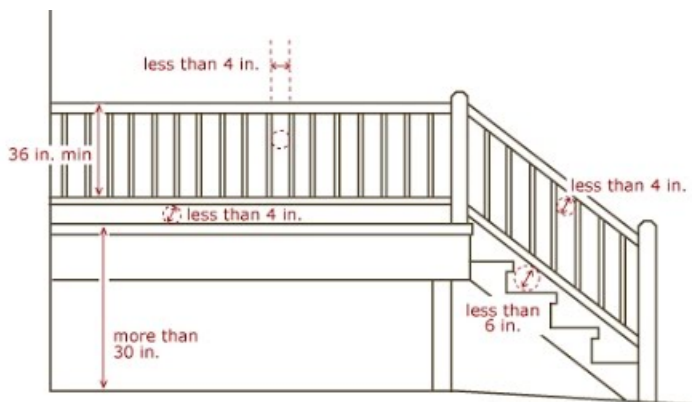
** A single concentrated load applied in any direction at any point along the top.

*** Guard in-fill components (all those except the handrail), balusters and panel fillers shall be designed to withstand a horizontally applied normal load of 50 pounds on an area equal to 1 square foot. This load need not be assumed to act concurrently with any other live load requirement.

**** Individual stair treads shall be designed for the uniformly distributed live load or a 300- pound concentrated load acting over an area of 4 square inches, whichever produces the greater stresses.

DECK LEDGER

Where supported by attachment to an exterior wall must be adequately secured to the rim joist/framing using lag bolts or screws. Such attachments shall not be accomplished by the use of toenails or nails subject to withdraw. Where a positive connection to a primary structure cannot be verified during inspection, decks shall be self- supporting. (IRC R507.8).



GUARDS

Must be installed when the deck is 30 inches or more above grade. Guards must be a minimum of 36 inches for residential, (42 inches for commercial) in height and able to withstand loads as specified in Table R301.5. Open guards must have intermediate rails or an ornamental pattern such that a sphere 4 inches in diameter cannot pass through.

LANDINGS

There must be a floor or landing at the top and bottom of each stair. The width of each landing shall not be less than the stairway served. Every landing shall have a minimum dimension of 36" measured in the direction of travel (*IRC R311.7.6*).

STAIRS (*IRC R311.7*)

- *Dimensions:* Width 36" minimum above handrail height. Rise 4" minimum to 7-3/4" maximum and Run 10" minimum. Open risers are permitted provided that the opening between the treads does not permit the passage of a 4" diameter sphere.
- *Handrails:* Handrails are required on stairs if there are 4 or more stair risers. Handrails must be installed 34"-38" above the nosing of the treads, at least 1-1/2" away from a wall, but no greater than 4 1/2 inches and the ends shall be returned or shall terminate in newel posts or safety terminals.

Fig. 57
Handrail
Height

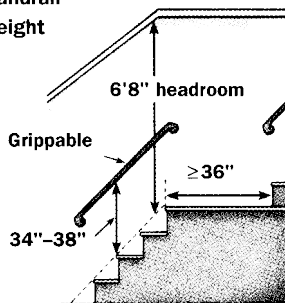
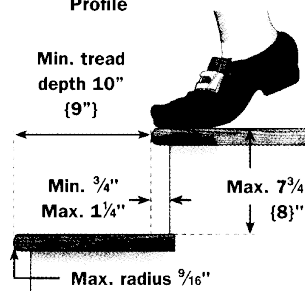


Fig. 56 • Stair
Profile



PROTECTION AGAINST DECAY

In areas subject to decay damage, use approved species and pressure treated lumber, decay-resistant heartwood or redwood, black locust, or cedars (*R319*). Posts, poles and columns supporting permanent structures that are embedded in concrete or in direct contact with the ground shall be approved pressure treated wood suitable for ground contact (*R317*).

FASTENERS

Fasteners for pressure treated wood shall be of hot-dipped galvanized steel, stainless steel, silicon bronze or copper (*R317.3*).

DECKS IN CONJUNCTION WITH A MANUFACTURED OR MOBILE HOME

A building permit is required from the Swinomish Office of Planning and Community Development, for a deck or roof which is attached to or associated with a mobile home.

REQUIRED DECK INSPECTIONS

The International Residential Code and the International Building Code requires the Swinomish Indian Tribal Community to make the following inspections. It shall be the duty of the permit applicant to cause the work to remain accessible, on test and exposed for inspection purposes. Neither the Tribal Building Official nor the Jurisdiction shall be liable for expense entailed in the removal or replacement of any material required to allow inspection. It shall be the duty of the person doing the work . . . “to notify the Building Official that such work is ready for inspection (and) to provide access to (a ladder when necessary) and means for inspection of such work” (*IRC/IBC Section R109*).

1. *Footings/foundations:* When the reinforcement and forms are in place and prior to placement of concrete. All materials for the footings/foundation shall be on the job.
2. *Final:* After the Deck is complete and ready for use. All guardrails, stairs, and handrails, shall be installed before final approval can be granted.
3. *Other:* The Building Official shall have the authority to make or require any other inspections to ascertain compliance with this code and other laws enforced by the Building Official (*IRC R109.1.5*).

Code sections referenced in this document do not necessarily contain the entire code section or the exact wording. Tables shown have been abbreviated to show some, but not necessarily all, options. Additional code requirements and options are the responsibility of the individual.