

Residential Decks

Permit and Construction Guidelines

Builders and homeowners are required to obtain a permit prior to constructing, altering or replacing a deck.

Plan Submittals

The following information shall be submitted to the building department for their review in order to obtain a deck permit. All of the information shown on the sample documents should be contained in all plan submittals. Additional information may be necessary.

The first requirement is submittal of a **Site Plan**, drawn to scale, for the property where the deck is to be built. Please provide all the information shown on the sample.

Site Plan

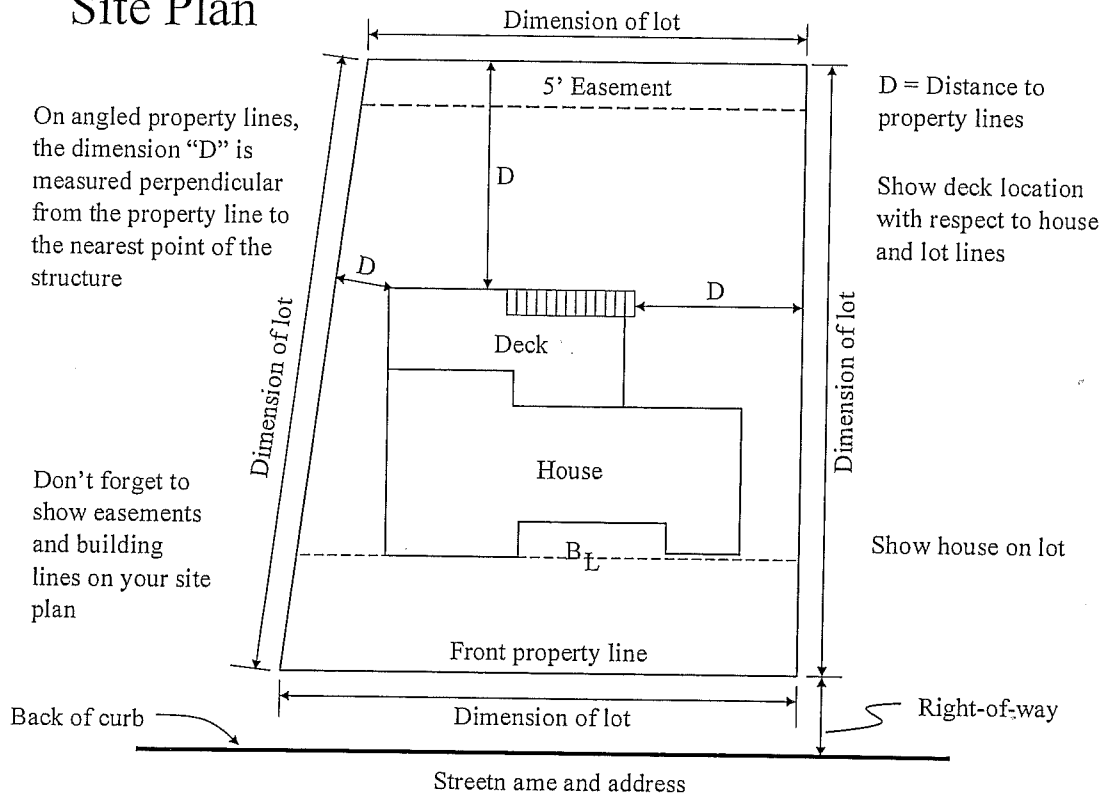


Figure 1

All lot dimensions shall be shown on the Site Plan. The distances to property lines must meet any side and rear yard setback requirements. This Site Plan may be drawn by the builder or the homeowner and does not have to be sealed by a design professional.

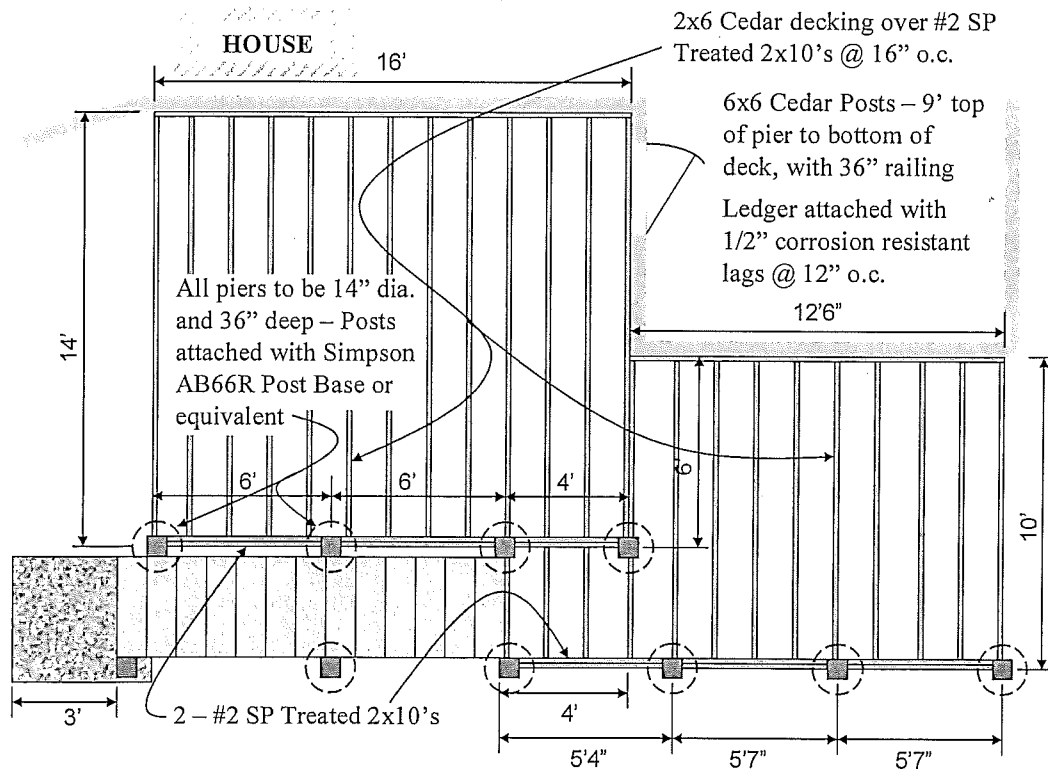
Inspections

Inspections are another part of the process. These inspections are done as a service to the homeowner and are required for all decks. Inspections should take place when various phases of the construction are completed. Where a deck is too close to the ground to verify the connection between the ledger and the house at the time of the inspection, then the deck shall be self-supporting.

Footing or pier hole inspections may be required before the concrete is placed. Remember that dry set concrete is not approved by most concrete manufacturers. The concrete needs to be properly mixed with the prescribed amount of water prior to placing in order for it to work properly and to meet code.

A separate framing (rough-in) inspection may be required if the under-floor framing and connections cannot be easily inspected during the final inspection. A final inspection is required after all the work is complete.

Deck Plan



Guardrails

For obvious safety reasons, guardrails are required when the deck floor is more than 30 inches above another floor or the grade below. The guardrail shall not be less than 36 inches in height. Open sides of stairs with a total rise of more than 30 inches above the floor or grade below shall have guards not less than 34 inches in height measured vertically from the nosing of the treads.

The perimeter support posts can be incorporated into the railing of the deck. The posts extend from the footings to the top rail cap. Balusters or ornamental closures that do not allow a 4-inch diameter sphere to pass through are used to fill in between the posts. These balusters in combination with the cap rail and bottom rail transfer the loads to the posts. In order to do this

Guardrail detail

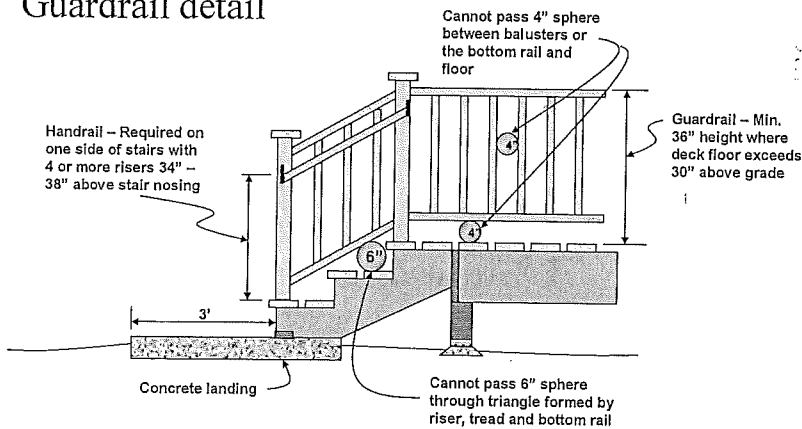


Figure 17

successfully, the main railing posts should be spaced approximately 6 feet apart. The advantage of this design is that the full length of the post resists the rail load.

Guardrails and handrails shall be designed to support a single 200 pound concentrated load applied in any direction at any point along the top. This is to be sure the railing can support the loads of people leaning on or running into it.

Returned Handrails

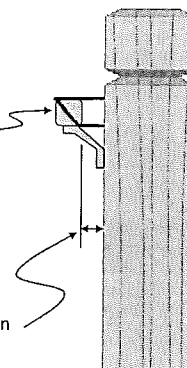
Handrails are required on stairs with four or more risers. The handrail shall be continuous the full length of the stairs and shall start at a point directly above the top riser of the flight and continue to a point directly above the lowest riser in the flight. The ends of the handrail shall be returned to the posts at the top and bottom of the stairs.

Handrail geometry

Type 1. Handrails with a circular cross-section shall have an outside diameter of at least 1-1/4" and not greater than 2".

If the handrail is not circular it shall have a perimeter dimension of at least 4 inches and not greater than 6-1/4 inches with a maximum cross section dimension of 2-1/4 inches.

Minimum 1-1/2" clearance between handrail and adjacent framing.



A 2x2 complies with the code requirements for a handrail if it runs continuous the full length of the stairs and the ends are returned.