

VILLAGE OF OAKWOOD HILLS BUILDING DEPARTMENT

A QUICK REFERENCE FOR THE BUILDING OF DECKS

FOR REFERENCE ONLY
SEE MUNICIPAL CODE FOR COMPLETE DETAILS

CONSTRUCTION REQUIREMENTS

All decks shall be designed for a minimum uniformly distributed live load of 40 lbs/square foot plus the actual dead load.

Deck material. Exterior decks shall be constructed of a material that is resistant to decay (cedar, redwood, treated lumber, etc.). The deck material shall be specifically manufactured or treated for exterior use. Only nails, bolts, anchors, etc., manufactured for exterior use and made of a corrosion resistant material shall be permitted to be used as connectors.

Concrete piers. Concrete piers are acceptable as supports for all open decks and shall be sized and spaced to support the design loads in accordance with Table R301.5 (40 lbs./ sq.ft. Live Load) All concrete piers shall extend below the frost line specified in Table R301.2 (1) (42" min below existing grade). Deck support posts shall be attached to the concrete piers with a corrosion resistant post anchor and a ½ inch (12.7 mm) nominal anchor bolt.

R507.3 Footings-Concrete piers. Decks shall be supported on concrete footings-piers or other approved structural systems designed to accommodate all loads in accordance with Section R301. All footings-concrete piers shall extend below the frost line specified in Table R301.2.

R311.7 Stairways. Where required by this code or provided, stairways shall comply with this section. Exterior wood stairways shall be supported at grade level on a concrete slab constructed in accordance with Section R506 or paver landing/patio in accordance with Section R335.

R311.7.1 Width. Stairways shall be not less than 36 inches (914 mm) in clear width at all points above the permitted handrail height and below the required headroom height. The clear width of stairways at and below the handrail height, including treads and landings, shall be not less than 31½ inches (787 mm) where a handrail is installed on one side and 27 inches (698 mm) where handrails are installed on both sides.

R311.7.5.1 Risers. The riser height shall be not more than 7¾ inches (196 mm). The riser height shall be measured vertically between leading edges of the adjacent treads. The greatest riser height within any flight of stairs shall not exceed the smallest by more than ¾ inch (9.5 mm). Risers shall be vertical or sloped from the underside of the nosing of the tread above at an angle not more than 30 degrees (0.51 rad) from the vertical. At open risers, openings located more than 18 inches (457 mm), as measured vertically, to the floor or grade below shall not permit the passage of a 4-inch-diameter (102 mm) sphere.

R311.7.5.2 Treads. The tread depth shall be not less than 10 inches (254 mm). The tread depth shall be measured horizontally between the vertical planes of the foremost projection of adjacent treads and at a right angle to the tread's leading edge. The greatest tread depth within any flight of stairs shall not exceed the smallest by more than ¾ inch (9.5 mm).

R311.7.6 Landings for stairways. There shall be a floor or landing at the top and bottom of each stairway. The width perpendicular to the direction of travel shall be not less than the width of the

flight served. For landings of shapes other than square or rectangular, the depth at the walk line and the total area shall be not less than that of a quarter circle with a radius equal to the required landing width. Where the stairway has a straight run, the depth in the direction of travel shall be not less than 36 inches (914 mm).

R311.7.8 Handrails. Handrails shall be provided on not less than one side of each flight of stairs with three or more risers.

R311.7.8.1 Height. Handrail height, measured vertically from the sloped plane adjoining the tread nosing, or finish surface of ramp slope, shall be not less than 34 inches (864 mm) and not more than 38 inches (965 mm).

R311.7.8.4 Continuity. Handrails shall be continuous for the full length of the flight, from a point directly above the top riser of the flight to a point directly above the lowest riser of the flight. Handrail ends shall be returned toward a wall, guard walking surface continuous to itself or terminate to a post.

R312.1.1 Guards required. Guards shall be provided for those portions of opened-sided walking surfaces, including floors, stairs, ramps, and landings that are located more than 18 inches (457.2 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. Insect screening shall not be considered as a guard.

R312.1.2 Height. Required guards at open-sided walking surfaces, including stairs, porches, balconies or landings, shall be not less than 36 inches (914 mm) in height as measured vertically above the adjacent walking surface or the line connecting the nosings.

Exceptions:

1. Guards on the open sides of stairs shall have a height of not less than 34 inches (864 mm) measured vertically from a line connecting the nosings.
2. Where the top of the guard serves as a handrail on the open sides of stairs, the top of the guard shall be not less than 34 inches (864 mm) and not more than 38 inches (965 mm) as measured vertically from a line connecting the nosings.

R312.1.3 Opening limitations. Required guards shall not have openings from the walking surface to the required guard height that allow passage of a sphere 4 inches (102 mm) in diameter.

Exceptions:

1. The triangular openings at the open side of stair, formed by the riser, tread and bottom rail of a guard, shall not allow passage of a sphere 6 inches (153 mm) in diameter.
2. Guards on the open side of stairs shall not have openings that allow passage of a sphere $4\frac{3}{8}$ inches (111 mm) in diameter.

Handrails adjacent to a wall shall have a space of not less than 1.5 inches (38 mm) between the wall and the handrail. The handgrip portion of handrails shall have a circular cross section of 1 ¼ inches min. to 2 5/8 inches max.

All risers must be equal (7 ¾" max.). All treads must be 10" min measured nose to nose. A 3'x 3' min. landing is required at the top and bottom of stairways and at all doorways. Stairways must be 36" min. in width. Back of risers to be solid or as not to exceed 4" max. opening.

Framing into headers or side of wood girders: Use steel joist hangers or metal framing anchors.

Overhead electric wires must be at least 10 feet above the highest walking or seating surface of the deck.

No deck shall be built over the septic system, except as may be allowed in accordance with the McHenry County Septic requirements.

A deck may not be located in any easement.

R507.3.4 “Covered or Enclosed Decks, Porches, Balconies and Three (3) Season Rooms.

Building plans shall be impressed with the seal of a duly licensed and registered Architect or Structural Engineer of the State of Illinois and shall comply with the requirements of this Code including the following requirements.

1. Covered or enclosed decks, balconies, porches, screened decks or porches, three (3) season rooms, and similar structures with a roof, attached to a dwelling unit may be supported on a footing/foundation, trench foundation, or solid concrete piers designed to accommodate all loads according to Section R301 and to transmit the resulting loads to the soil within the limitations as determined from the character of the soil placed at or below the frost line.
2. In the event an existing open deck is proposed to be enclosed the concrete piers shall be designed by a Licensed Architect or Structural Engineer. The structural evaluations and considerations for the alterations for the deck enclosure shall include, but not be limited to, additional piers and supports, altering the existing piers, enlarging the wood structural members, verify the existing piers are sufficient to support the additional loads, determining the existing deck and proposed structure are designed and can be constructed and or altered to safely support all building loads, design criteria and requirements.
3. These structures shall be considered outdoor living space and non-livable structures.
4. The deck/porch enclosure shall not exceed one (1) story in height.
5. Approved wood for enclosed or screened decks, balconies, porches, and similar structures shall be natural decay resistive or pressure treated, which shall be used for post supports framing that are left exposed and not protected by weather resistant construction.
6. The enclosure shall consist of screens only. Windows, window/screen combinations, glazing glass or flexible windows/glass are not permitted.
7. The exterior walls of any such addition supported by piers shall not be infilled with any material other than insect screening and the framework necessary to support the screening, except a guard as required by Section R316.1. The exterior walls may also be finished on the inside or exterior not to exceed a maximum of four (4) feet high, as measured above the floor of the deck structure. Screening alone shall not be considered meeting the required guard requirements. The walls enclosing the roof construction and the supporting header may also have exterior finish applied. All interior and exterior finishes shall be exterior grade materials.
8. The ceiling may be finished on the interior with approved exterior materials.
9. The space shall not be heated from the house heating appliance system. Also, no permanent electric or gas heaters may be installed.
10. A fireplace shall not be installed within the enclosure.
11. The floors shall not be finished with plywood subflooring, carpet, tile or any other floor finish other than deck material.
12. Insulation is not permitted in the walls, roof or ceiling area.
13. When the deck structure is supported by piers, enclosing or skirting below the bottom of the deck surface and around the structure may be lattice or other material which shall be at least fifty percent (50%) open. Full enclosure of deck structures supported by piers is not permitted.
14. Access shall be provided to the space below the structure.

15. Structures shall not be placed over window well or basement emergency escape window wells.
16. An electrical meter or gas meter shall not be inside the screened structure.
17. A dryer vent shall not be exhausted into the screen enclosure.
18. A heating appliance vent shall not be exhausted into the screened enclosures.
19. A deed restriction signed by the property owner(s) must be filed with the Building Official and must be recorded by the owners with the McHenry County Recorder of Deeds stating that the attached enclosed screened deck/porch shall not be altered to become living space or habitable space unless additional plans are submitted and new permits are issued to alter the screened porch/deck to become habitable space. The deed restriction required by this section shall accompany the permit application and building plans for the deck enclosure.

ZONING REQUIREMENTS

The setback requirements for a deck shall comply with the principal building setback of the zoning district. Check zoning requirements

TO APPLY FOR A PERMIT

1. Complete permit application
2. Submit 2 copies of a scaled (1/4"= 1') plan with information about construction of the deck, including foundation detail, size and location of all framing members, type of lumber, detail of attachment to the house, details of stairs and railing. Show pier size and spacing, beam size and spacing, and all dimensions. Provide a detail section through deck.
3. Submit 2 copies of plat of survey and indicate the location of the deck and distance to property lines.
4. Submit 2 copies of septic system plan and indicate on the septic plan the location of the proposed deck.
5. Copy of proposal from contractor.
6. All contractors must be bonded with the Village for \$10,000

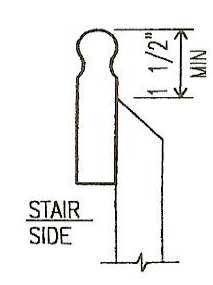
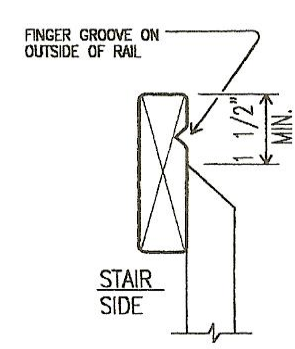
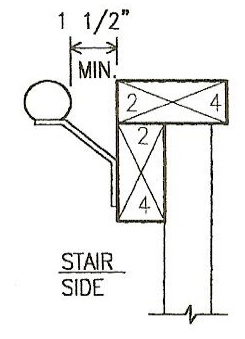
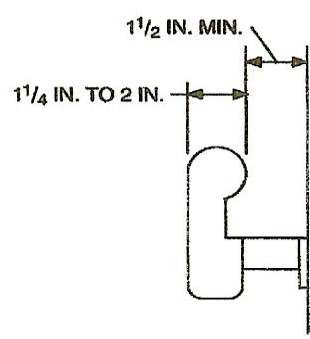
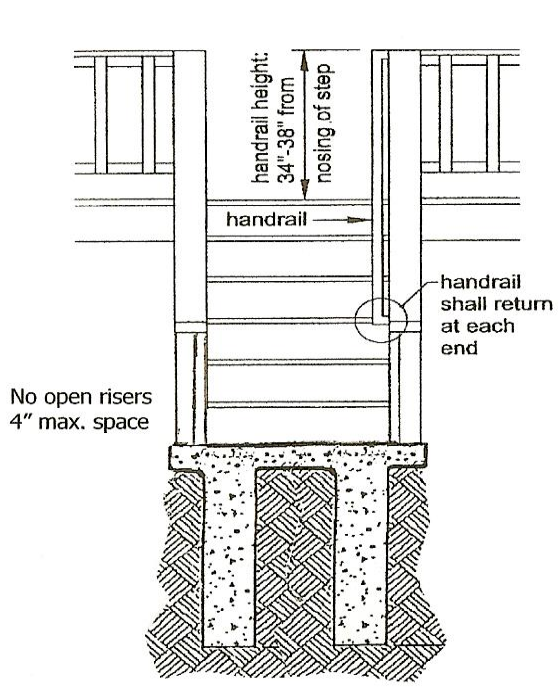
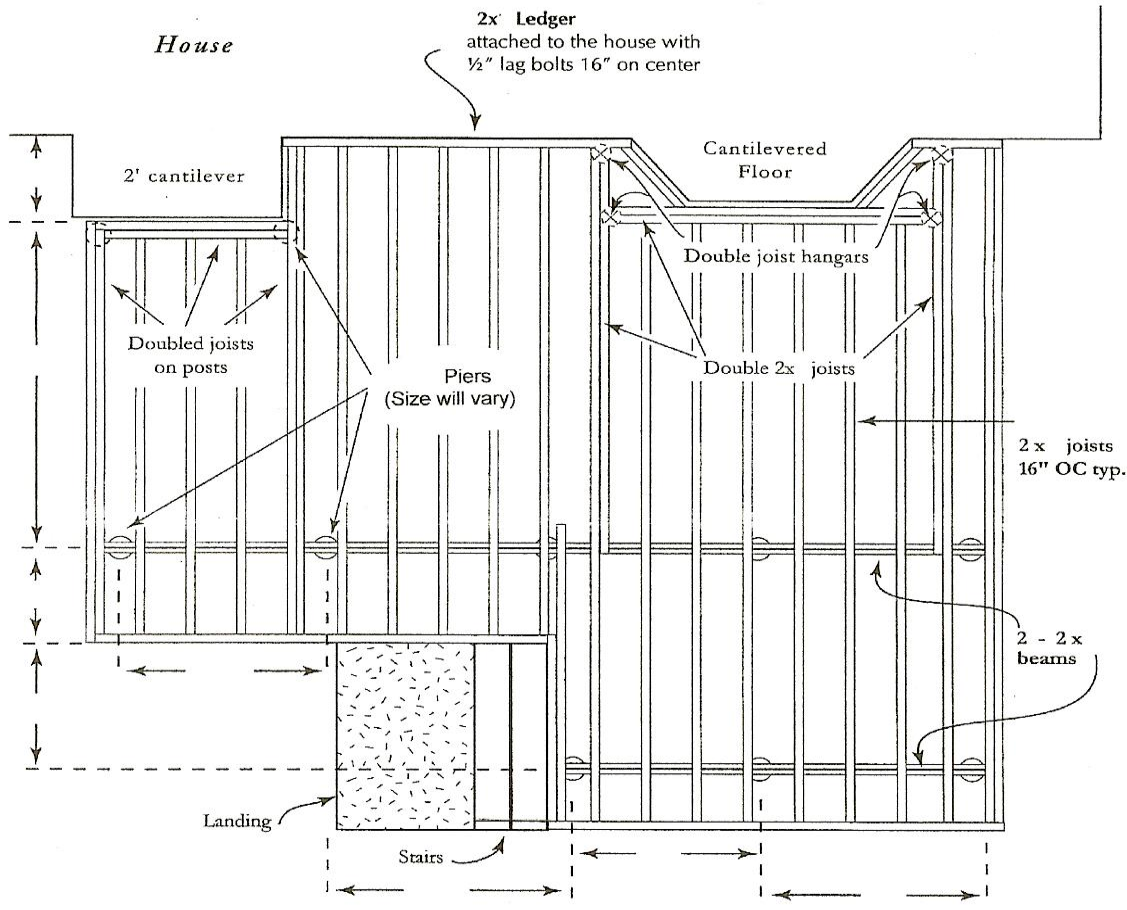
INSPECTION REQUIREMENTS

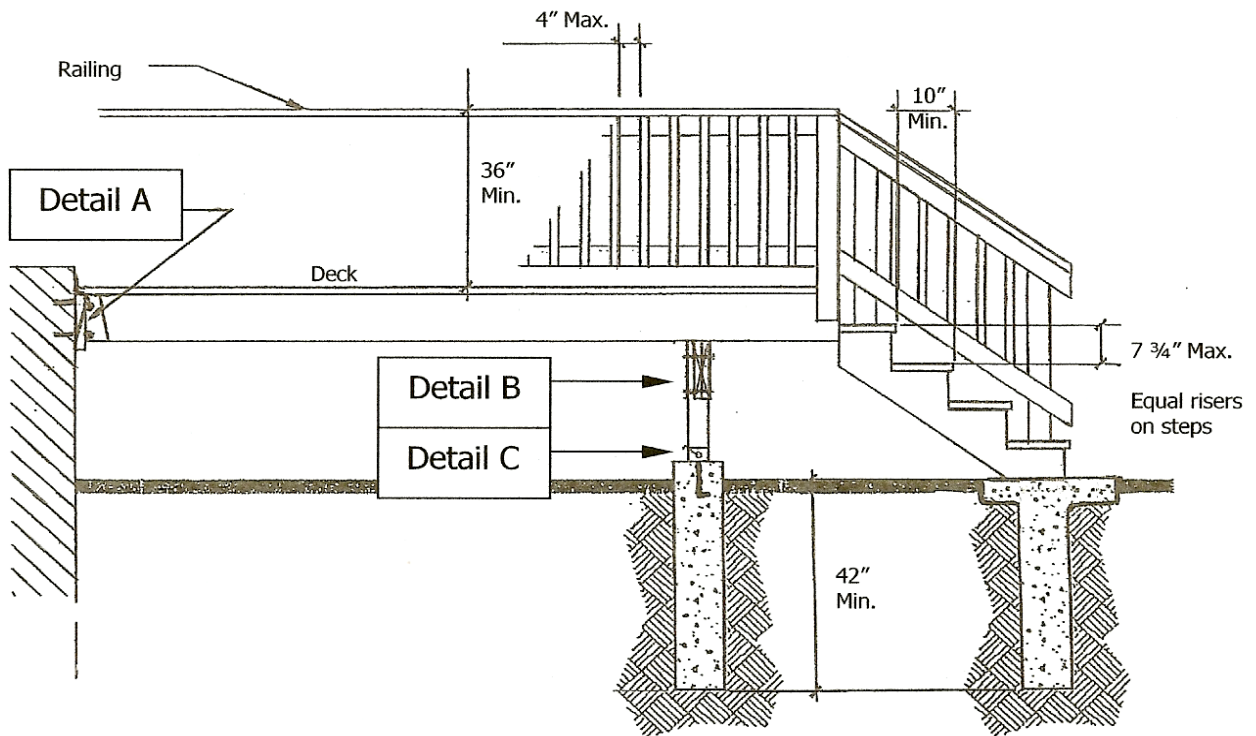
1. When the pier holes are dug (prior to placing concrete) they must be clear of all water and loose soil.
2. Rough framing
3. Final inspection upon completion of deck.

Call J.U.L.I.E. at 800-892-0123 or contact them at illinois1call.com for utility locations and before digging.

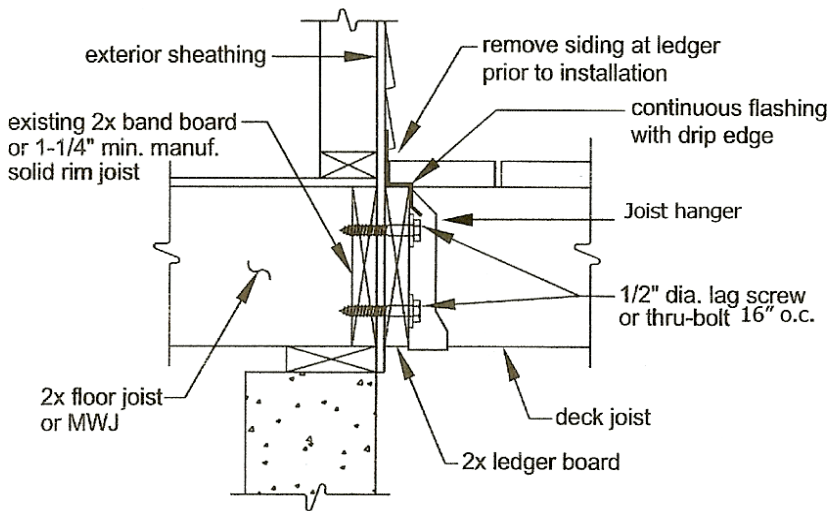
The above is provided for general information purposes only and shall not be construed as total compliance with any or all Codes and Ordinances of the Village of Oakwood Hills. Always consult the Codes or Ordinances for accurate information

Sample Plan View

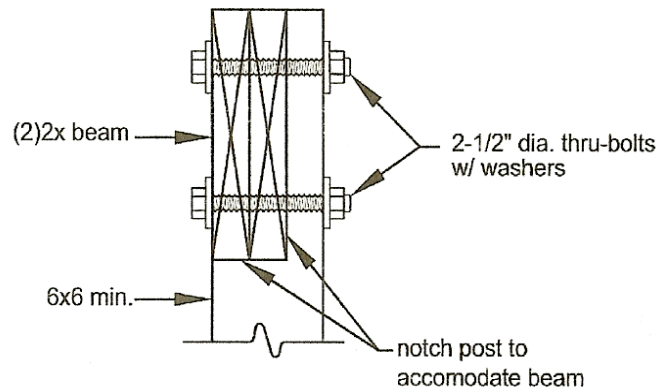




Detail A



Detail B



Detail C

