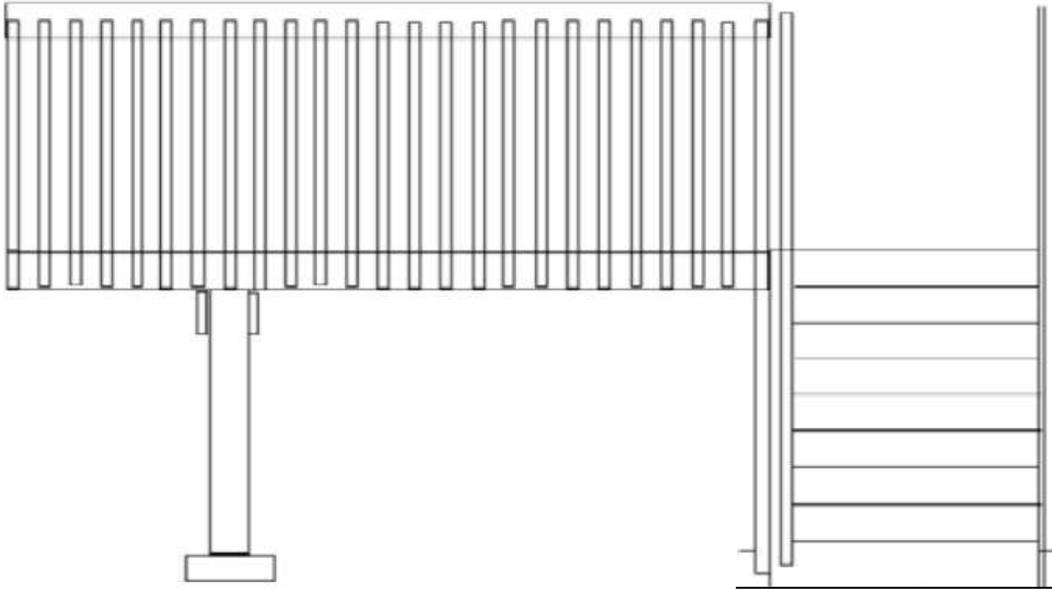


# Patio Decks



## CITY OF FARGO BUILDING INSPECTION DEPARTMENT

The State of North Dakota requires that you call [1-800-795-0555](tel:1-800-795-0555) at least two business days before you dig.

This handout does not address any covenants or easements assigned to the property, nor does it relieve you of code compliance with items that may not have been included from the 2009 International Residential Code (IRC).

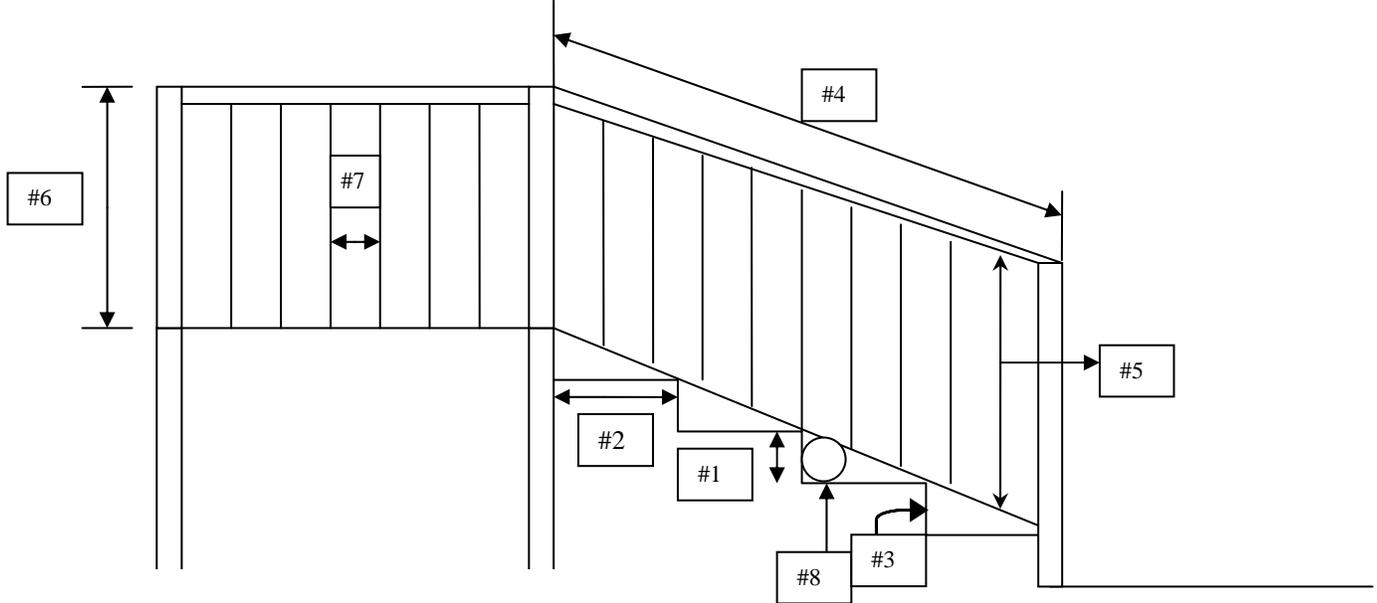
If you need an inspection or have questions please call our office **241-1561**

# Common Issues that Arise in Deck Building

- 1) The ledger board should be fastened to the house using ½” lag screws, ½” bolts or equivalent fasteners approved by the International Residential Code
- 2) Hangers must be attached using nails, ***not screws***, approved for the hanger used and all nail holes in the hanger must be filled with a fastener.
- 3) Beams attached to posts should be attached with ½-inch bolts or have a minimum of 1½ inches of bearing.
- 4) Joist hanger fasteners must be attached according to the manufacturer’s specifications.
- 5) Lag screws, bolts and washers shall be hot dipped galvanized or stainless steel.
- 6) Lag screws, bolts or other approved fasteners shall be staggered.
- 7) The ledger board shall be flashed.
- 8) Handrails must run the full length of the stairs at a height between 34 and 38 inches.
- 9) Guardrails are required on any open sides of stairways that connect to a deck more than 30 inches above grade.
- 10) Open risers are not allowed on stairways unless there constructed so that a 4” sphere cannot pass through the open part of the riser.

REMINDER: These are not the complete code requirements for decks and stairs. Refer to the 2009 International Residential Code for the complete regulations.

# Specific Code Requirements

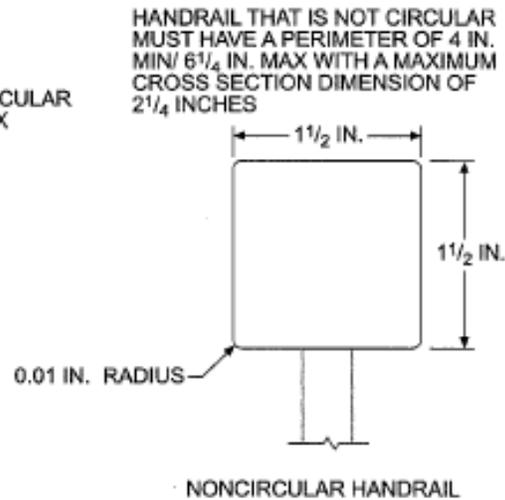
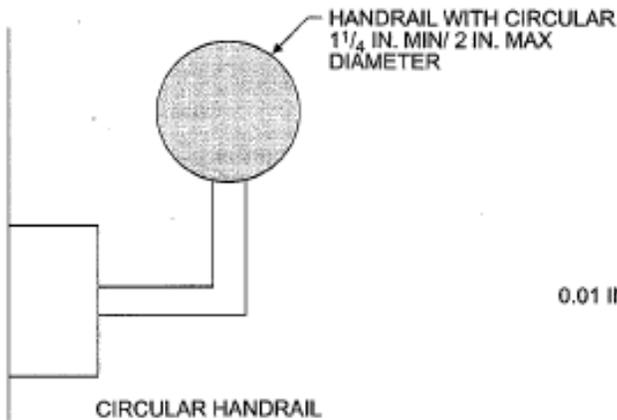
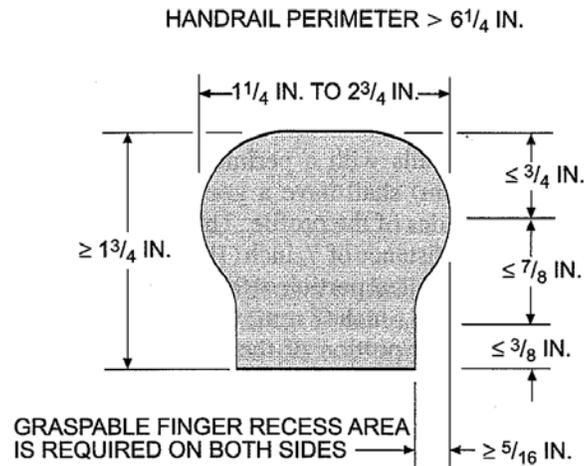


**R311.5.1 Width** Stairways shall not be less than 36 inches in clear width at all points above the permitted handrail height and below the required headroom height. Handrails shall not project more than 4.5 inches on either side of the stairway and the minimum clear width of the stairway at and below the handrail height, including treads and landings, shall not be less than 31.5 inches where a handrail is installed on one side and 27 inches where handrails are provided on both sides.

1. **R311.5.3.1 Riser height** The maximum riser height shall be 8 inches. The riser 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 3/8 inch. Open risers on stairways are not permitted.
2. **R311.5.3.2 Tread depth** The minimum tread depth shall be 9 inches. 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 3/8 inch.
3. **R311.5.3.3 Profile** Open risers are permitted, provided that the opening between treads does not permit the passage of a 4-inch diameter sphere.
4. **R311.5.6 Handrails** Handrails shall be provided on at least one side of each continuous run of treads or flight with four or more risers.
5. **R311.5.6.1 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 and not more than 38 inches.
6. **R312.1 Guards required** Porches, balconies or raised floor surfaces located more than 30 inches above the floor or grade below shall have guards not 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 (864 mm) in height measured vertically from the nosing of the treads.
7. **R312.2 Guard opening limitations** Required guards on open sides of stairways, raised floor areas, balconies and porches shall have intermediate rails or ornamental closures which do not allow passage of a sphere 4 inches or more in diameter.
8. **R312.2 Guard opening limitations** The triangular openings formed by the riser, tread and bottom rail of a guard at the open side of a stairway are permitted to be of such a size that a sphere 6 inches cannot pass through.

# Graspable Handrail Guidelines

Any handrail must meet the requirements as graspable regardless of its shape. Below you will find a guide for the most common shapes of handrail so that you may determine whether the rail you have chosen will comply with these requirements.



# Definitions

Covenant:	A formal agreement among property owners within a specific subdivision establishing conditions or restrictions upon the use of land within that subdivision.
Easement:	A legal agreement for exclusive or nonexclusive use of a portion or all of a property granted to some party other than the property owner.
Foundations:	The foundation must be constructed of masonry, concrete, or treated wood and may extend below the frost line.
Patio deck:	A structure that is open to the sky and which contains neither walls nor overhead components other than handrails or guardrails above the deck surfaces.
Property Line:	A recorded boundary of a plot. It is the owner's responsibility to know where and how to locate the property lines. The City of Fargo assumes that the owner knows this information. Errors due to lack of property line knowledge will cause delays and additional expense.
Required:	Needed; essential; necessary
Required Yard:	An open space, other than a court, on the same lot with a building that is required to be present based on the requirements of the specific zoning district.
Required Yard, Front:	A yard extending across the full width of a lot and having a depth required by the specific zoning district. Such yard may not be occupied by any structure other than those structures permitted by the Land Development Code. The depth shall be measured perpendicular from the front property line.
Required Yard, Rear:	A yard extending across the full width of a lot and having a depth required by the specific zoning district. Such yard may not be occupied by any structure other than those structures permitted by the Land Development Code. The depth shall be measured perpendicular from the rear property line.
Required Yard, Side:	A yard extending perpendicular the sideline of the lot to that point required by the specific zoning district. Such yard may not be occupied by any structure other than those structures permitted by the Land Development Code.

# Land Development Code Regulations

## Article 20-05, Residential Dimensional Standards

**Table 20-0501**

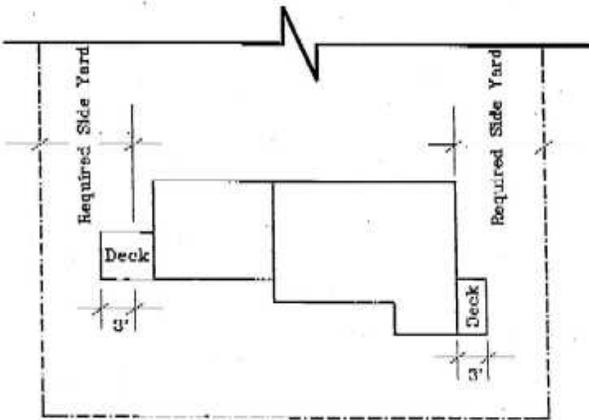
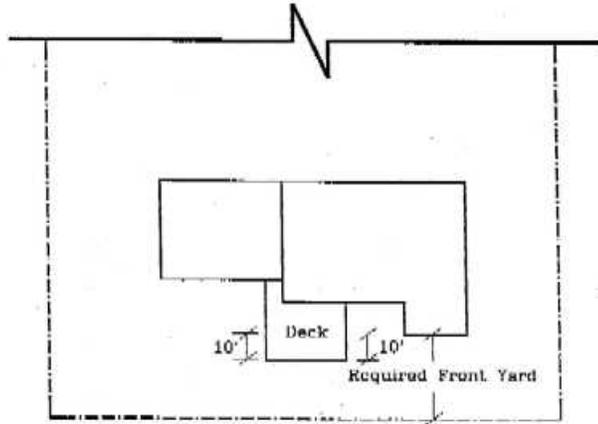
Dimensional Standard	Zoning District										
	AG	SR-0	SR-1	SR-2	SR-3	SR-4	SR-5 <sup>[9]</sup>	MR-1	MR-2	MR-3	UMU
<b>Maximum/Minimum Density</b> (UPA - Units per Acre)	0.1 Max.	1.0 Max.	2.9 Max.	5.4 Max.	8.7 Max.	12.1 Max.	14.5 Max.	16.0 Max.	20.0 Max.	24.0 <sup>[1]</sup> Max.	18.0 Min.
<b>Minimum Lot Size</b>											
Area (Sq. Ft.)	10 Ac	1 Ac <sup>[2]</sup>	15,000	8,000	5,000	3,600	3,000	5,000	5,000	5,000	2,420
Width (Ft.)	200	120	80	60	50 <sup>[3]</sup>	34 <sup>[3]</sup>	25	50 <sup>[3]</sup>	50 <sup>[3]</sup>	50 <sup>[3]</sup>	50 <sup>[3]</sup>
<b>Minimum Setbacks (Ft.)</b>											
Front	50 <sup>[4]</sup>	50	35	30	20	15 <sup>[5]</sup>	15 <sup>[5]</sup>	25	25	25	10
Interior Side <sup>[6]</sup>	25	25	15%/15	10%/10	10%/10	4	4	15%/25	15%/25	10	5
Street Side	25 <sup>[7]</sup>	25	17.5	15	12.5	10	10	12.5	12.5	12.5	10
Rear	50	50	25	25	15	15	15	20	20	20	15
<b>Max. Building Coverage</b> (Pct. of Lot)	NA	25	25	30	35	45	50	35 <sup>[8]</sup>	35 <sup>[8]</sup>	35 <sup>[8]</sup>	75
<b>Minimum Open Space</b> (Pct. of Lot)	NA	NA	NA	NA	NA	NA	NA	35	35	35	NA
<b>Maximum Height</b> (Ft.)	35	35	35	35	35	35	35	35	45	60	60

Source: 2985 (1999), 3062 (1999), 4039 (2000), 4165 (2001), 4338(2003), 4695 (2009).

- [1] Higher densities may be allowed with the Bonus Density provisions of Sec. 20-0505.
- [2] SR-0 minimum district size is 20 acres. See section 20-0203-A.
- [3] Minimum lot width subject to limitation of access as provided in Section 20-0702.
- [4] Minimum 100 feet from right-of-way on Arterial or section line road.
- [5] Minimum 20-foot setback shall be provided between front-entry garages and nearest edge of sidewalk crossing plate.
- [6] #/# = Percent of Lot Width/Feet (whichever is less)
- [7] Minimum 75 feet from right-of-way on Arterial or section line road.
- [8] Maximum of 37.5 percent of building coverage shall be allowed if site amenity is provided in accordance with Sec. 20-0403.B.7. If the amenity is contained within the footprint of one primary structure, the floor area of that amenity is counted as open space, but is not subtracted from the area of the building.
- [9] The SR-5 zoning district is limited to a maximum size of 21,000 square feet, but may exceed 21,000 square feet, up to a maximum of two acres provided the district is within 600 feet of a private or public dedicated open space feature, such as a public park, private park, school yard or playground that is accessible to residents of the SR-5 district, any of which shall be a minimum of two acres or more in size. For purposes of identifying a single SR-5 zoning district, parcels adjacent to one another that are, or will be, the same zoning classification shall be deemed to be within the same zoning district and, therefore, shall be subject to the maximum size limitation.

# Location on Property

Front yard requirements, based on zoning district, are as follows: Zoning District SR-0 is 50 Feet; SR-1 is 35 Feet; SR-2 is 30 Feet; SR-3 is 20 Feet; SR-4 is 15 Feet. An open patio deck is allowed to encroach 10 feet into a required front yard.

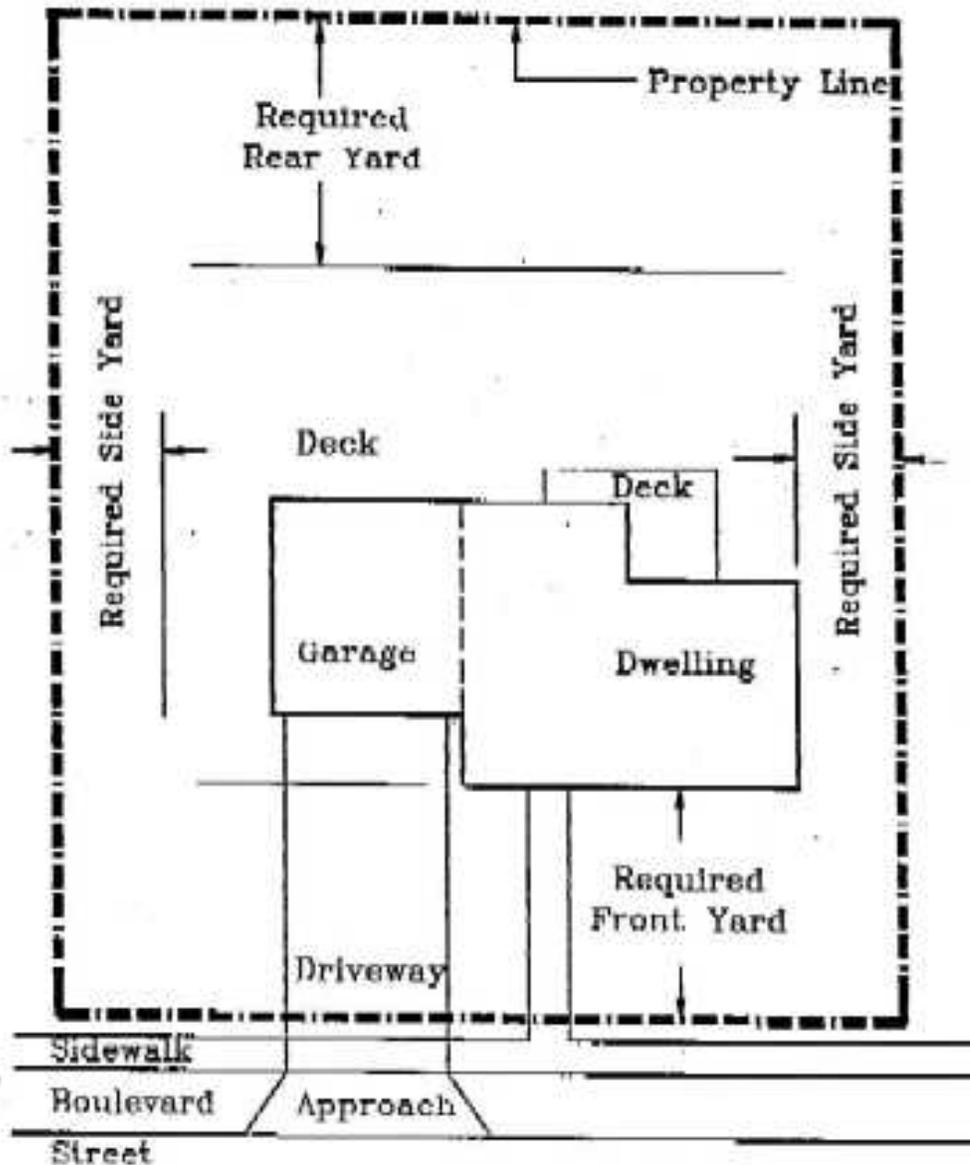
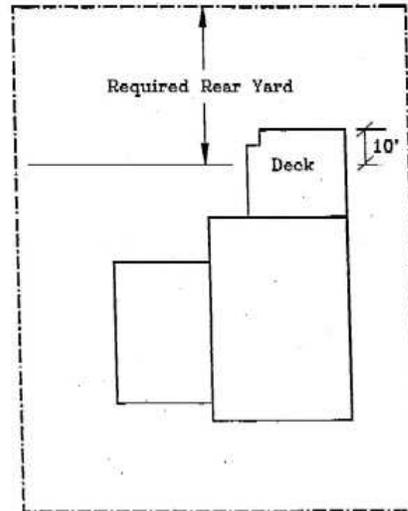


Side yard requirements, based on zoning district, are as follows: Zoning District SR-0 at 25 feet; SR-1 at 15 feet or 15% of the lot width; SR-2 and SR-3 at 10 feet or 10% of the lot width; and, SR-4 at 4 feet. An open patio deck is allowed to encroach 3 feet into a required side yard.

If your property is on a corner, the street side yard requirements are as follows: Zoning District SR-0 at 25 feet; SR-1 at 17.5 feet; SR-2 at 15 feet; SR-3 at 12.5 feet; and, SR-4 at 10 feet. An open patio deck may encroach 10 feet into a required street-side setback.

An open patio deck may encroach 10 feet into a required street-side setback.

Rear yard requirements, based on zoning district, are as follows: Zoning district SR-0 at 50 feet; 25 feet in SR-1 and SR-2 zoning districts; and, 15 feet in SR-3 and SR-4. An open patio deck is allowed to encroach 10 feet into a required rear yard.



# Common Questions

## **Is a building permit required for constructing a patio deck or the replacement of a patio deck?**

Yes! Before you begin any work you must get a building permit.

## **Why should I get a permit?**

- To have assistance in determining whether your patio deck is constructed safely;
- To help safeguard your family, property, and visitors from damage or injury;
- To help protect yourself from complaints from future owners;
- To establish a record of the construction and remodeling history on your property.

## **What is needed to get a permit?**

- The address and zoning of the property;
- Whether the deck will be attached to the house and, if so, how;
- The estimated value of the patio deck; and
- A site plan showing the size and location of all existing buildings on your property along with the proposed patio deck. Basic construction drawings are helpful but are not required.

## **How long does it take to get a permit for a deck?**

Generally, it takes about fifteen minutes to obtain a deck permit, depending on the information provided and the complexity of the project.

## **Are inspections required?**

Yes! It is the responsibility of the permit holder to arrange for required inspections. This would include a framing and a final inspection. If your deck is designed or engineered for future enclosure, this would also include a foundation inspection. Inspections are a part of the permit process however, so there is no additional cost beyond the permit fee for these inspections. Building inspections consist of examining and evaluating to determine if the work is compatible with the accepted standard of construction.