

# RESIDENTIAL DECK REQUIREMENTS <br> CITY OF NOVI <br> Community Development Department (248) 347-0415 

cityofnovi.org

## Submit the Following:

- Application for Building Permit
- Woodland Affidavit
- Wetland Affidavit
- Homeowner Association approval (Builder Approval if Association not yet active)
- Two (2) complete sets of plans drawn in detail to show how the deck is to be built. Please give specific dimensions on your plans. We do not scale drawings. Insufficient drawings may cause rejection and unwanted delays.
- Homeowner Permit Policy Form (Only for homeowner acting as contractor)

The drawings should include the following information.
A. Plot Plan (see example A)

- $\quad$ Size and location of all the new construction and all existing structures on the site.
- $\quad$ Show distances from lot lines and easements.
B. Building Plans - at a minimum will include:
- Deck Framing Plan
- Elevation
- Cross Section


## With the following information shown:

1. Foundations - Show depth of foundation and diameter of post holes. A "Foundation Pier Worksheet" is attached for sizing of post holes.
2. Joist size and spacing i.e., $2 \times 6-16$ " oc.; $2 \times 8-24$ " oc; etc.

Spacing of posts must provide adequate structural support. Joists spacing and bearing lengths must provide adequate structural support. Post locations, joist locations, joist sizes, and spans of all members must be shown on the submitted drawings.
3. Clear span of joists (distance between supports).
4. Column size and spacing i.e, $4 \times 4 ; 4 x 6 ; 6 x 6$ and distance between them.

Note: Columns (posts) located in backfill area of house must be dug to the depth of the house footings.
5. Beam size and clear span-2-2x8, 2-2x10 and distance between columns.
6. Details showing the connection of the beams and posts and the type of hardware to be used. (All hardware must be "Hot-Dipped Galvanized")
7. Deck height above grade (approximate height at the highest point).
8. Guard rail height and baluster spacing.
9. Stair information, rise, run, and graspable hand rail/guard rail.
10. Homeowner Association approval (Builder approval if Association not yet active).

NOTE: Ledgers attached to the ends of pre-manufactured open web joists, brick veneer, chimneys, cantilever overhangs and bay windows is prohibited. In such cases decks shall be free standing. Approved ledger attachment shall be thru-bolted with nuts and washers and must be accessible for inspection from inside the house.

## OPEN UNENCLOSED DECKS

Zoning Requirements:
Within the City of Novi, decks SHALL NOT:

- Project more than 18 feet into a rear yard setback
- Project into any easements
- Project into a front yard setback more than 4 feet
- Project into a side yard setback more than 2 inches per foot for each foot of a required side yard setback.

NOTE: Standard Required Setbacks to Meet Minimum Zoning Requirements:

|  | RA | R1 | R2 | R3 | R4 |
| :--- | :--- | :--- | :--- | :--- | :--- |
| ${ }^{\prime}$ | $45^{\prime}$ | $30^{\prime}$ | $30^{\prime}$ | $30^{\prime}$ | $30^{\prime}$ |
| Front Yard - | $20^{\prime}$ | $15^{\prime}$ | $15^{\prime}$ | $10^{\prime}$ | $10^{\prime}$ |
| Minimum Side Yard - | $40^{\prime}$ | $40^{\prime}$ | $30^{\prime}$ | $25^{\prime}$ |  |
| Min. Aggregate of 2 Sides- | $50^{\prime}$ | $35^{\prime}$ | $35^{\prime}$ | $35^{\prime}$ |  |

- Corner lots require two (2) front yard setbacks - 30 feet each.
- Specific subdivisions may have different setbacks due to deed restrictions.


## EXAMPLE A



Michigan Residential Code Requirements: The Sections listed below are not the entire Code requirements for decks but are intended to help in the design of the proposed work.

MRC Section

1. Raised floor surfaces more than 30 inches above grade below require guard rails not less than 36 inches in height.
2. Guardrails shall resist a 200 lb . single concentrated Load applied in any direction at any point along the top.

R312.1

Table
R301.5
3. Spaces between balusters must be less than 4 inches.

R312.3
4. Stairs with four (4) or more risers require a graspable

R311.7.7 handrail.
6. Graspable handrails on stairs must be 34 inches

R311.7.7.1 minimum to 38 inches maximum measured vertically above the nosing.
7. All stairway handrails shall have a circular cross sectional area with an outside diameter of at least 1-1/4 inches and not greater than 2 inches. (See attached sheet on acceptable handrails)
8. Stair riser must be no more than $8-1 / 4$ inches and remain constant within each stair set.
9. Stair treads must be at least nine (9) inches deep and remain constant within each stair set
10. Beams must be notched into posts and bolted or rest on posts utilizing a post cap connector.
11. Joists bearing on sides of beams or ledgers must be secured with joist angles or joist hangers.
12. Decks must be positively anchored to the primary structure, the deck ledger cannot be bolted through the brick for support. If the decks cannot be anchored to the primary structure, then they shall be self supporting
13. Approved Plans are required to be on site

R106.3.1 for all inspections.

NOTE:Inspections are required for the exposed 42 inch deep post and for the completed deck. When skirting is applied to the perimeter below the deck surface, do not apply the skirting until after final approval. Inspections must be scheduled online at www.cityofnovi.org by 3:30 PM for an inspection the following day.

## Stairway Illumination MRC R303.6

All interior and exterior stairs shall be provided with a means to illuminate the stair, including the landings and treads. Interior stairs shall be provided with an artificial light source located in the immediate vicinity of each landing at the top and bottom of the stair. Exterior stairs shall be provided with an artificial light source located in the immediate vicinity of the top landing of the stair.

## Exceptions:

1. An artificial light source is not required at the top and bottom landing provided an artificial light source is located directly over each stair section.
2. Alternatively, for interior stairs, lighting designs providing a minimum illumination level of 10 footcandles (10.8 1x) at each stair tread and portions of landings within 3 feet ( 914 mm ) of an interior step.
3. Alternatively, for interior stairs, lighting designs providing a minimum illumination level of 1 footcandle ( 1.81 x ) at each stair tread and a portion of walkways within 3 feet ( 914 mm ) of a step serving a dwelling.

## Light Activation MRC 303.6.1

The control for each activation of the required interior stairway lighting shall be accessible at the top and bottom of each stair without traversing any step of the stair. The illumination of exterior stairs shall be controlled from inside the dwelling unit unless continuously illuminated or automatically activated.
*** If you are reading this from the Internet please contact the Community Development Department for sample drawings. ***

