



## BUILDING DECKS

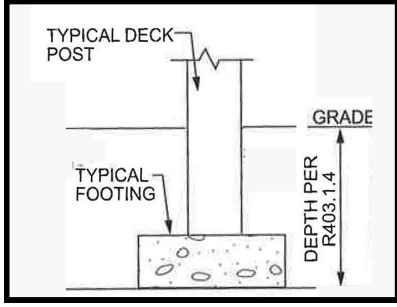


### FOUNDATIONS

There are several different ways to do the foundations for a deck.

- Pre-made biscuit
- Redi-Mix
- Concrete poured from a truck

Remember to always mix bagged concrete BEFORE placing it in the hole. Make sure that the depth of your footings are below the frost requirement which is 42" to the bottom of the hole.



### HANDRAILS

Handrails are required if you have 4 or more risers on your stairway, or if the deck surface is greater than 30" to the ground.

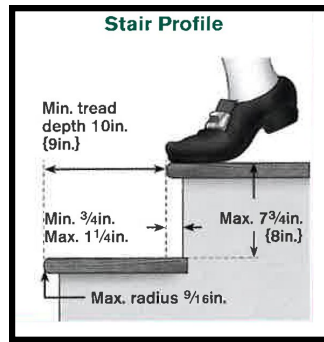
Handrails shall be provided on not less than one side of each continuous run of treads or flight with four or more risers.

Handrail height is measured vertically from sloped plane adjoining the tread nosing, or finished surface of ramp slope and shall not be less than 34" and not more than

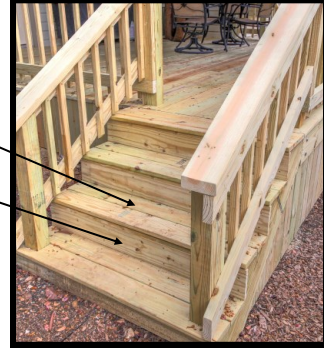
### STAIRS

Step requirements: Tread depth shall be 9" or more.

Riser requirements: The maximum riser height shall be 8 1/4" or less. All risers must be the same height.



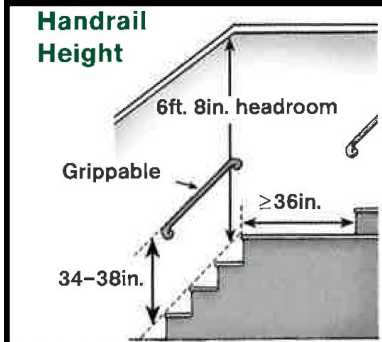
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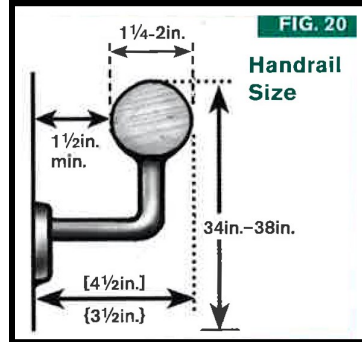
Handrail grip size requirements:

Type 1: not less than 1 1/4" and not more than 2".

However, there are other options available, please contact the building department for more information at (989) 781-0150.



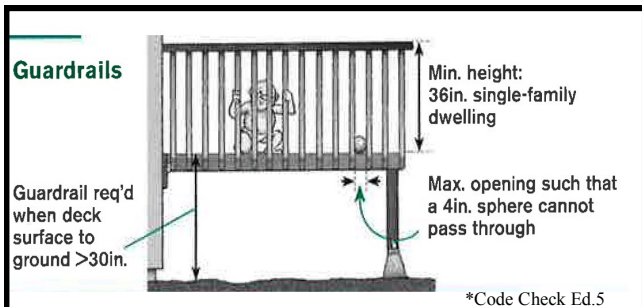
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### RAILINGS/GUARDS

Handrails and spindles on the main deck are called guards, and are required in certain circumstances. Guardrails are needed for a deck when the deck surface is 30" or more above the ground and is at any point within 36" horizontally to the edge of an open side. Insect screening does not count as a guard.



\*Code Check Ed.5

The height for a guard shall be a minimum of 36" or more.

All openings on a guard/railing shall not allow for the passage of a 4" sphere.



### IMPROPERLY BUILT DECKS CAN BE DANGEROUS

More than a million decks are built and replaced in the United States each year. While decks can increase the value or add aesthetic quality to your home, the construction and safety of decks has become a concern in the building industry. Due to decks being constructed improperly, an increased number of deck failures, injuries and even deaths have occurred. Decks are the most dangerous part of a home. They cause more injuries and loss of life than any other part of the home structure (the only exception would be hurricanes and tornadoes).

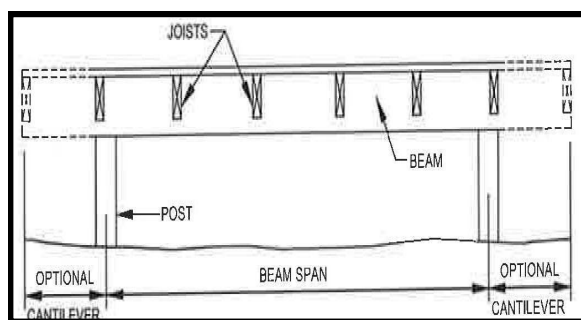
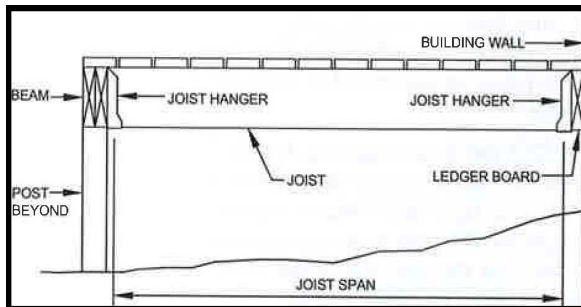
### DO DECKS REALLY NEED TO MEET CODE REQUIREMENTS?

Decks need to be designed to adequately meet certain stresses such as the weight of people and objects on them. This along with lateral and upload shifts resulting from wind and seismic activity. For general design requirements, see the 2012 IBC and 2015 IRC.

### STRUCTURE REQUIREMENTS

Please contact the Building Inspector for the necessary span size and structure requirements as well as for any inspections or questions you might have.

Deck Construction terms you should know:



### GETTING STARTED

Great projects always start with a site plan.

A site plan will show the size of what you are going to build as well as the distance between what you are building and the property lines as well as other structures. The site plan must show footing depths, rise and run of the stairs and the handrail design.

Please contact the building department before starting any project to see what you may need at (989) 781-0150.

### DO I NEED A PERMIT?

**You do not need a permit if:**

- The deck does not exceed 200 sq. ft. in area
- The deck is not more than 30 in above grade at any point
- The deck is not attached to a dwelling or accessory structure
- The deck is not within 36 in of dwelling or accessory structure
- The deck does not serve as any ingress or egress door of the dwelling or accessory structure

If you do not meet the above listed requirements, you must secure a building permit. If you are exempted from needing a building permit you must still build your deck to the Michigan Code Requirements.