

# Deck Standards

All work shall not commence until a permit is approved and issued. All work shall be performed in accordance with these standards:

## Definitions

1. Deck: any structure which serves as a raised horizontal platform on a floor constructed of wood or other materials without enclosing a wall or roof
2. Attached Deck: any deck that is physically connected to the principal building or accessory building or any deck used for exiting purposes, whether or not physically attached
3. Detached Deck: any deck, which is not physically attached to the principal building or accessory structure and located in the accessory yard

## Soil & Excavation Requirements for Deck Piers or Foundation

1. No pier shall be placed on soil with a bearing capacity of less than 2,000 pounds per square foot unless the pad support is designed through structural analysis
2. All organic material (roots, etc.) shall be cut off at the sidewalls of the borings or trench. All organic and loose material must be removed from the cavity area prior to pouring concrete

## Deck Piers, Pads and Foundations

1. General footings, pads, or piers shall be adequate bearing area to safely distribute all live loads to the supporting soil without exceeding the bearing capacity of the soil
2. Type and size of concrete pads, piers or foundations
  - a. Decks attached to principal buildings and detached decks used as an exit from the principal building:
    - ✓ Concrete pads: the footing shall be 48" below grade. The minimum dimensions of this pad shall be 8" in diameter
    - ✓ Piers: the minimum depth of concrete piers shall be 48" below grade. The minimum dimensions of this pier shall be 8" in diameter. The concrete pier(s) shall extend a minimum of 6" above grade unless and approved mounting bracket is secured at the tip surface of the pier(s).

## Framing

1. General Requirements
  - a. Materials: All wood framing used in deck construction shall be pressure-treated against decay or shall be a species of wood that is natural decay resistant
  - b. Design Location: Decks shall be designed for a minimum of 40 pound per square foot loading
2. Column Posts
  - a. Column Spacing: Column posts shall be spaced per Comm.20.25 Standards
  - b. Column Size (measured from grade to deck joists):
    - ✓ All column posts not exceeding six feet (6') in height shall be a minimum of four inches by four inches (4"x4") nominal thickness
    - ✓ All column posts exceeding six feet (6') in height shall be a minimum of four inches by six inches (4"x6") nominal thickness

- c. Lateral Support: Decks over four feet (4') in height above grade shall be constructed in such a manner of mechanically attached to the deck foundation to resist lateral movement
3. Beams
    - a. Beam Size: All beams shall be sized per Comm.20.25 Standards
      - ✓ Beams shall be a minimum of two (2), two inch (2") member (2-2x8) or one (1), four inch (4") thick member (1-4x8)
      - ✓ Beams maybe spaced on each side of the post provided that blocking is installed minimum of twenty-four inches (24") on center between the beam members

### Guardrails and Handrails

1. Guardrails: All decks, which are more than twenty-four inches (24") above grade, shall be protected with guardrails
2. Handrails: Every stairway of more than three (3) risers or twenty-four inches (24") shall be provided with at least one handrail. Handrails or guardrails shall be provided on all open sides of stairways
3. Guardrails and Handrail details:
  - a. Height: Handrails shall be located at least thirty inches (30"), but not more than thirty-eight inches (38"), above the nosing treads. Guardrails shall be located at least thirty-six inches (36") above the surface of the deck
  - b. Open Railings: Open guardrails or handrails shall be provided with intermediate rails or an ornamental pattern to prevent the passage of sphere with a diameter greater than four inches
  - c. Railing Loads: Handrails and guardrails shall be designed and constructed to withstand a 200-Pound load applied in any direction

### Stairway-Treads and Risers

1. Risers: shall not exceed eight inches (8") in height measured from tread to tread
2. Treads: shall be at least nine inches (9") wide, measured horizontally from nose to nose
3. Variation: there shall be no variation in uniformity exceeding 3/16 inch in the width of a tread or in the height of risers
4. Stair stringers shall be supported in accordance in the same manor as used for the deck

### Alternative Provisions and Methods

#### Comm.21.225 Decks

Decks attached to dwellings and detached decks which serve an exit shall comply with the applicable provisions of this chapter, including but not limited to:

1. Excavation requirements of s. Comm.21.14
2. Footing requirements of s. Comm.21.15
3. Frost penetration requirements of s. Comm.21.16
4. Load requirements of s. Comm.21.02
5. Stair, handrail and guardrail requirements of s. Comm.21.04
6. Decay protection of requirements of s. Comm.21.10

**\* CODES FOR DECKS \***

If the deck is attached to a building, or if detached but serves as an exit, the post holes (footings) must be 48" below finished grade. These holes must be inspected before being filled.

Floor joists within 18" of the earth and girders within 12" of the earth must be pressure treated.

Any stringers or joists of 8' in length shall be supported on joist hangers.

STAIRS: Stair width must be at least 36".

Risers shall not exceed 8" in height, measured vertically from tread to tread.

Treads shall be at least 9" wide, measured horizontally from nosing to nosing.

There shall be no variation in uniformity exceeding ~~3/8~~ 3/8" in the width of the tread or in the height of the riser.

HANDRAILS: Every stairs of more than 3 risers shall be provided with at least one handrail.

Handrails shall be provided on all open sides of stairways.

Handrails shall be located at least 30" but not more than 34" above the nosing.

Width of handrails shall not be more than ~~5~~ 2 and 1/8 inches.

GUARDRAILS: Decks that are more than 24" above grade shall be protected by guardrails.

Guardrails shall be at least 36" above the upper surface of the floor.

Open guardrails or handrails shall be provided with intermediate rails or all ornamental pattern with openings no larger than ~~6~~ 4"

Handrails and guardrails shall be designed and constructed to withstand a 200lb. load applied in any direction.

Handrails and guardrails shall be decay resistant or pressure treated wood.

All other provisions of the appropriate codes shall be adhered to.

Subdivision regulations and deed restrictions, if any, must be adhered to along with the appropriate zoning restrictions for the district.

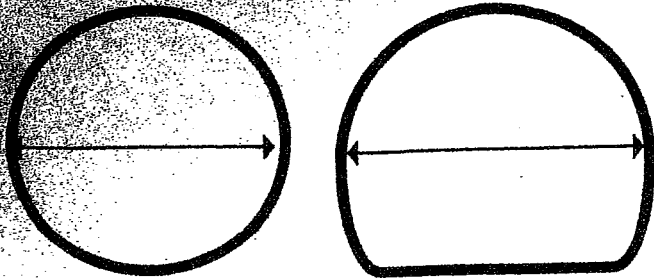
In some locations, a zoning permit may be required before a building permit can be issued.

**A FINAL INSPECTION IS REQUIRED UPON COMPLETION.**

21.04(2)(a)5.

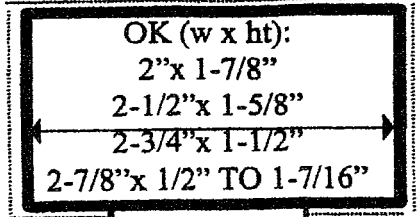
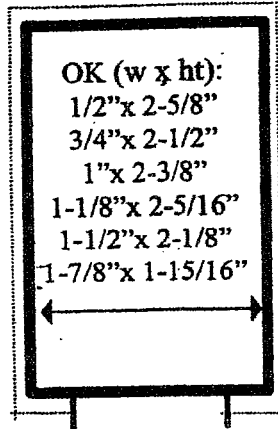
# HANDRAIL SHAPES

## ROUND



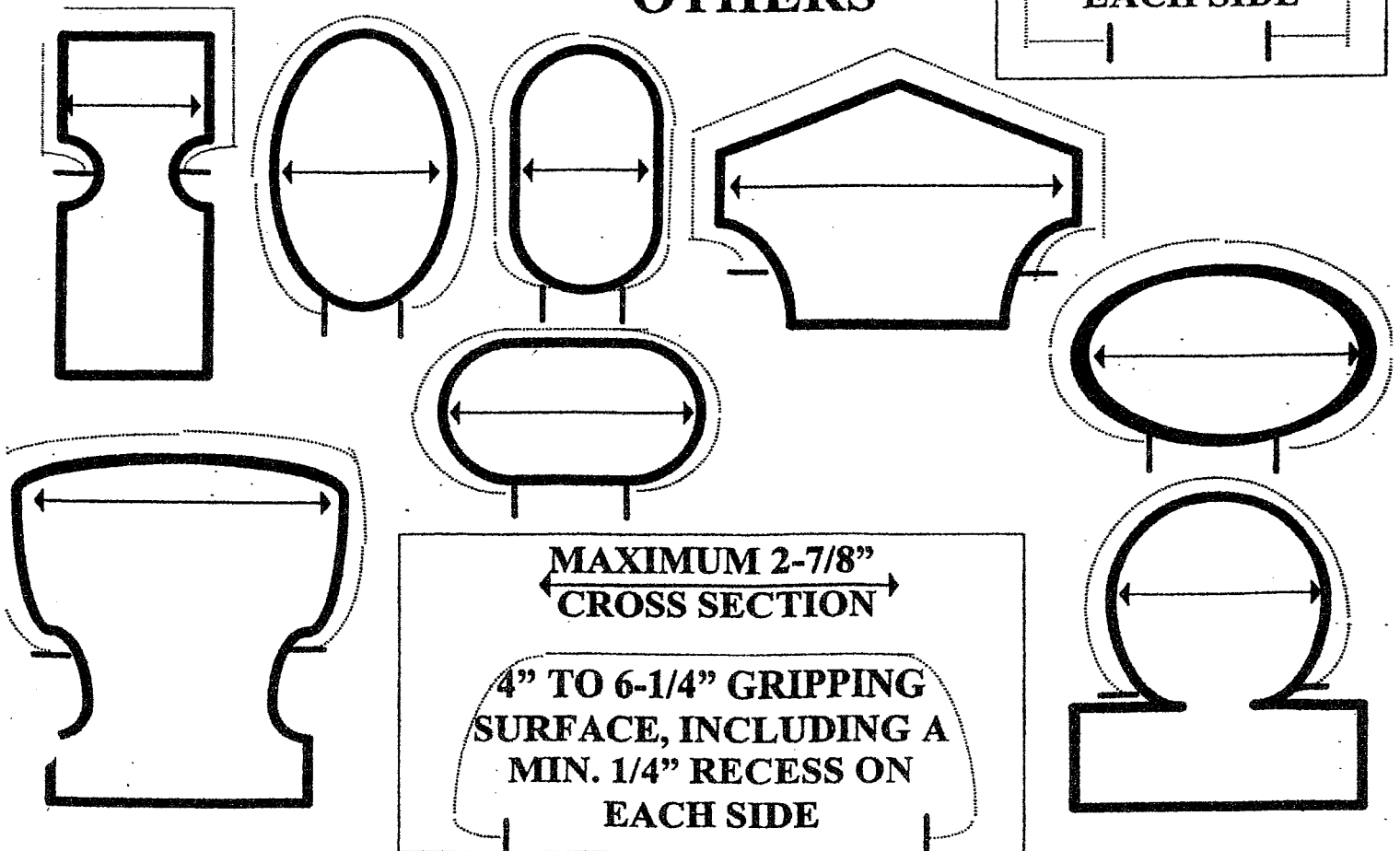
MAXIMUM 2"  
DIAMETER

## RECTANGULAR

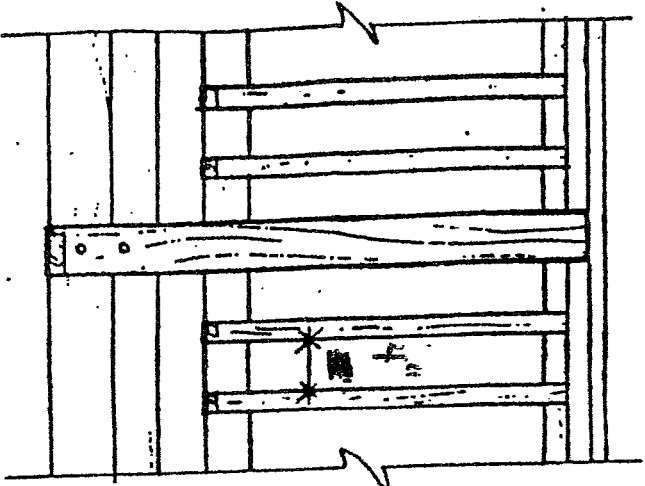


MAXIMUM 2-7/8"  
CROSS SECTION  
MAX. 6-1/4"  
GRIPPING  
SURFACE INCL.  
MIN. 1/4"  
RECESS ON  
EACH SIDE

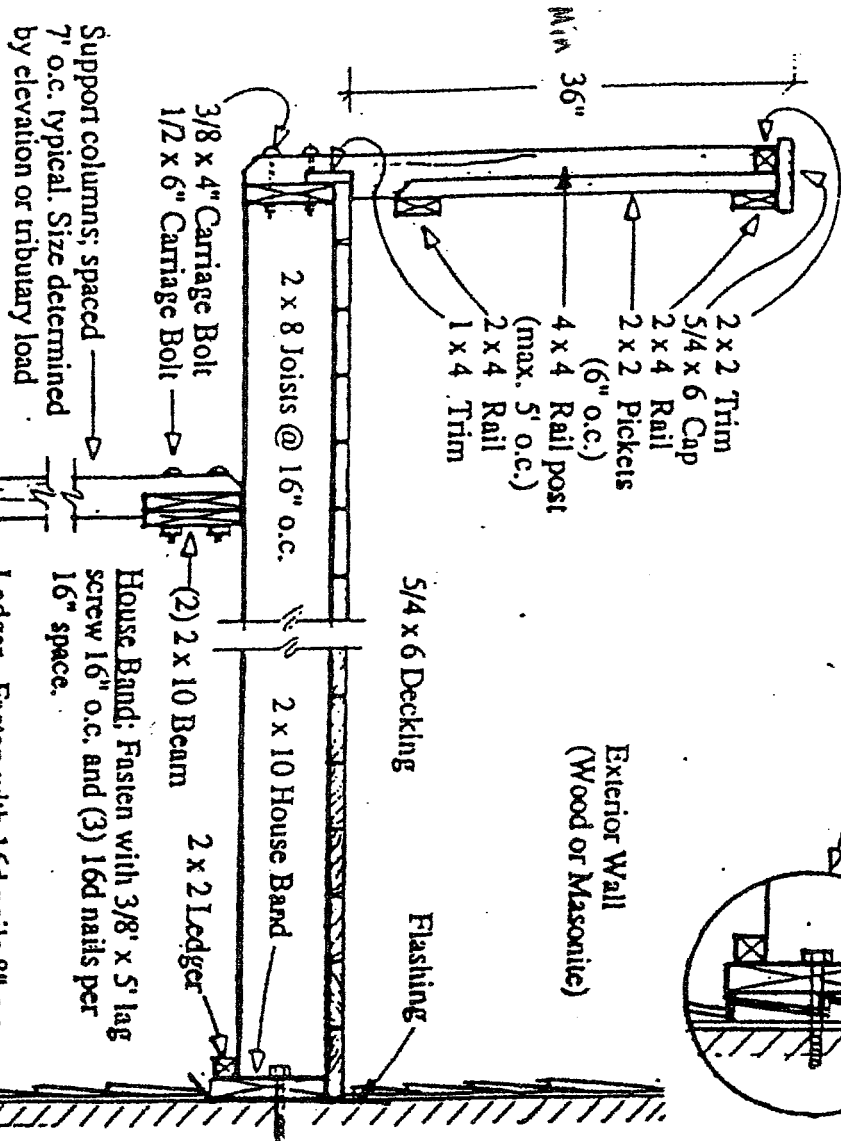
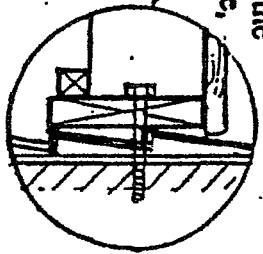
## OTHERS



MAXIMUM 2-7/8"  
CROSS SECTION  
4" TO 6-1/4" GRIPPING  
SURFACE, INCLUDING A  
MIN. 1/4" RECESS ON  
EACH SIDE

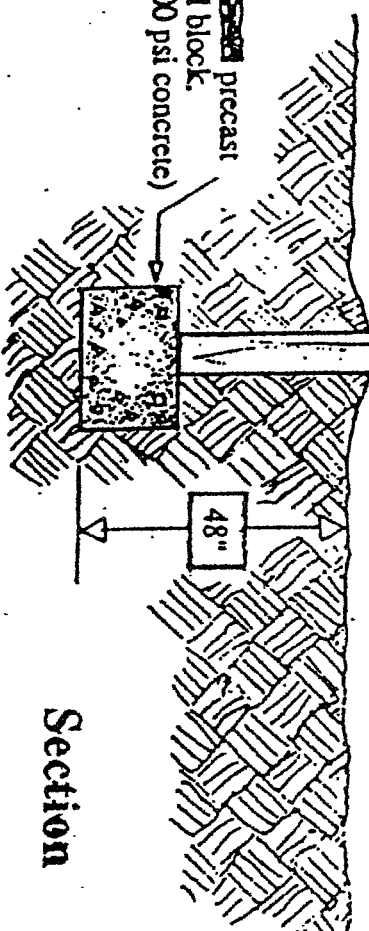


Note: With vinyl or aluminum siding, the band may be bolted directly to the house, without flashing or removal of siding.



Note: See plan for specific details or special loading conditions.

MINIMUM 4" THICK x 8'Ø Footing: precast or poured block. (min. 2500 psi concrete)



**Section**