RESIDENTIAL DECKS

Building and Zoning Requirements

Deck Building Permits

Required for any deck 30 inches or more above adjacent grade or attached to a structure with frost footings. The Inspection card shall be posted on the exterior wall of the residence until the final inspection has been made.

- Homeowners may do their own work.
- Contractors shall be state licensed.
- Cost of the permit is fixed and determined by using the Residential Building Permit Fee schedule.

Required information for deck permits:

- Certificate of Survey, drawn to scale indicating the lot dimensions, the location and ground coverage area of existing structure(s), and the location and area of the proposed deck. Indicate the setbacks from property lines. A Certificate of Survey may be on file at City Hall.
- Deck plans that show the following:
  a. Size and depth of footing
  b. Height and design of guardrail
  c. Type of footing forms
  d. Size and spacing of joists
  e. Size of deck
  f. Size of Beams
  g. Size and spacing of posts
  h. Type of floor boards
  i. Type of lumber
  j. Height of deck off ground
  k. Plans should be on 8½x11 or 11x17 paper

REQUIRED INSPECTIONS: Call 952-758-1138 between 8:00 A.M. and 4:30 P.M. to schedule an inspection. Provide at least 24 hour advance notice and permit number at time of scheduling.

Footings and Framing

- Footings shall be at least 42" deep. See table R507.3.1 for diameter using 2000 psf Load Bearing Value. Footing forms shall be cardboard tubes. Deck footings are subject to frost heave. Deeper footings and footings wider at the bottom will help prevent frost heave.
- If using push pin technology, min 50" pins required. See Manufacturers info for sizing.
- Call for footing inspection after footing holes are dug, before pouring concrete. Footing holes shall not contain loose soil, water or mud. Call for a framing and final inspection when deck is complete.
- If a portion or all of the deck is less than or equal to 60 inches above grade, a pre framing inspection is required prior to installing the decking or flooring so the inspector can examine the under floor framing.
- Prior to digging, contact Gopher State One @ 811, 651.454.0002 or 800.252.1166

Treated Wood

- All wooden members of decks shall be treated or rot resistant wood (redwood or cedar).
- Posts Post shall be anchored to prevent movement.

Composite Material

- Composite Material must be pre-approved during the plan review process. Submit evaluation report number and product information at time of review. Purchasing the composite product prior to city approval is not recommended.

Cantilevers: Overhanging Joist and Beams

- Deck joists shall not overhang beams by more than allowed in table R507.6, nor should beams overhang posts by more than ¼ of the allowable beam span in Table R507.5. Floor joist spacing at 24-inches on center requires 2x decking and floor joist spacing at 16-inches on center requires 1x decking

Beams

- Beam end joints and splices shall be made over posts. Beams bolted to posts shall have at least two 1/2" carriage bolts staggered on each post.
- Beam depth shall be greater than or equal to depth of joist with a flush beam connection.

Ledger

- Ledger board shall be 2x8 minimum.
- Ledger boards shall be bolted/lagged to solid material such as 2x10 rim joist, floor trusses, sill plate, top plates, etc. Materials not acceptable to bolt/lag into include manufactured I joists, foam filled rim joists and wall sheathing.
- Bolt ledger with a minimum of 1/2" bolts/lags spaced 16" on center staggered top and bottom
- Flashing is required where the deck ledger board is attached to the house.
- Lateral Load Connectors shall be installed at 2 locations per R507.9.2(1) or 4 locations per R507.9.2(2), within 24” of each end of the decks attachment to the ledger.

Cantilever

- Cantilevered areas (a boxed out area or bay usually with a patio door) will not support a deck. Double the joists around the cantilever areas to make the deck self-supporting or provide additional posts and beam.

Joist hangers

- Joist hangers are required wherever joists do not have at least 1-1/2" of bearing. Joist hangers shall be proper size (i.e. 2x8 joists require 2x8 joist hangers). Joist hangers require one nail or screw per nailing hole.
- Wood construction connectors cannot be installed with wood screws, they must only be installed with approved fasteners (see hanger/connector manufacturer website for acceptable fasteners)
- Stainless steel or triple dipped hot-dip galvanized connectors and fasteners are required with treated wood.

Guardrail

- Decks more than 30" off grade require a guardrail at least 36" high, built so that a 4" object cannot pass through and withstand 200 pounds of horizontal force.

Stairs

- The minimum clear width of stairway is 36”. Handrails are allowed to project up to 4 ½” into the minimum allowed width.
- The maximum rise is 7-3/4". Maximum opening in risers is 4”. The greatest riser height shall not exceed the smallest by more than 3/8". Special attention should be given to make sure the top and bottom riser heights are correct. The minimum run is 10". The greatest tread depth shall not exceed the smallest by more than 3/8”.

Handrails

- Continuous handrails are required for 4 or more stair risers. Handrails shall be 34"-38" above the tread nosing. The handgrip portion of handrails shall be 1-1/4 " to 2" wide and in a shape that is easy to grip firmly.
- The ends of the handrail shall be returned to posts to avoid the possibility of catching loose clothing.

- Stairs to decks more than 30" above grade require guardrails built so that a 4-3/8" object cannot pass through.

Escape Windows

- There shall be a minimum of 36" clear height over basement escape windows.

Future Porch

- Future porch additions on the deck require additional structural design and additional distance or setbacks to the property lines. Typical porch footings are up to 24" in diameter and up to 60" deep (See table R507.3.1 for sizing). Beams should be located under future wall locations and sized to carry the wall and roof loads. It is recommended future porch plans be submitted with the deck plans for review.

Completion Date

- Decks must be completed within six (6) months of issuance of the permit unless an extension is granted.

Required Inspections

a) **Footings**: After the holes are dug, but PRIOR TO THE POURING OF THE CONCRETE!
b) **Framing**: To be made after all framing, blocking, and bracing are in place and prior to closing the construction so as to make it inaccessible for inspection. (This inspection can be completed at the time of the final inspection if all parts of the framing will be visible and accessible at the final inspection).
c) **Final**: To be made upon completion of the deck and finish grading.
d) Other inspections: In addition to the three inspections above, the inspector may make or require other inspections to ascertain compliance with the provisions of the code or to assist you with your questions or concerns during the construction process.
e) Decks using push pin technology, more than 60” above grade require only a final inspection.

While not all inclusive, this information should be used as a general guide to meeting the minimum standards of the building code.

Complete exterior deck code requirements can be viewed at the following website (Code Section R507):
https://codes.iccsafe.org/content/MNRC2020P1/chapter-5-floors#MNRC2020P1_Ch05_SecR507

118 Central Ave N, New Prague, MN 56071
952-758-4401
www.ci.new-prague.mn.us

(A) Spacing between posts: _____ (Table R507.5)

(B) Beam size (2 – 2x10, etc): _____ (Table R507.5)

(C) Post Size (6x6, etc): _____ (Table R507.4)

(D) Joist Length and Size: _____ (Table R507.6)

(E) Joist Cantilever: _____ (Table R507.6)

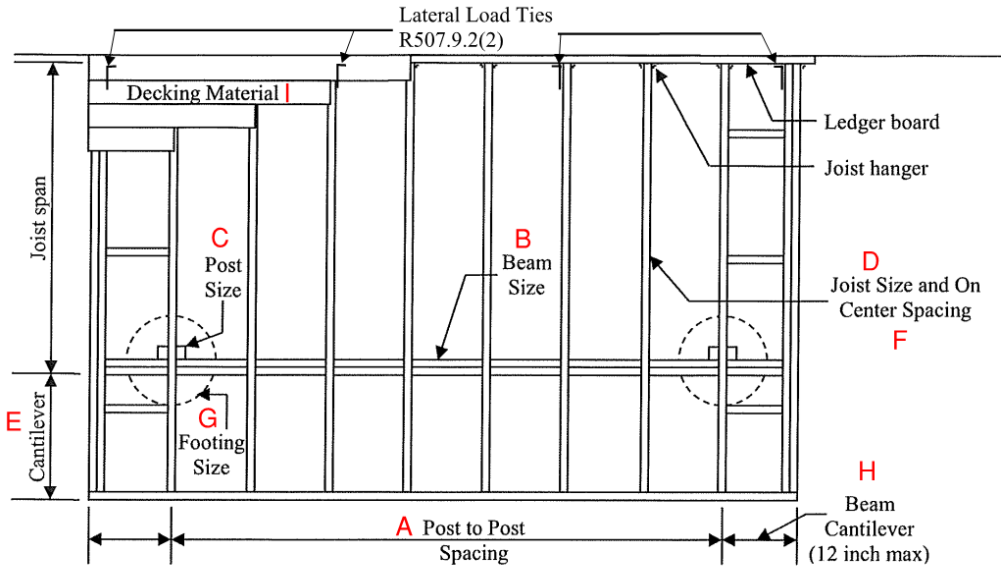
(F) Spacing Between Joists (12”, 16”, etc): _____ (Table R507.7)

(G) Footing Sizes (Corner/Intermediate): _____ (Table R507.3.1)

(H) Beam Cantilever (up to ¼ allowable beam span (A)): _____

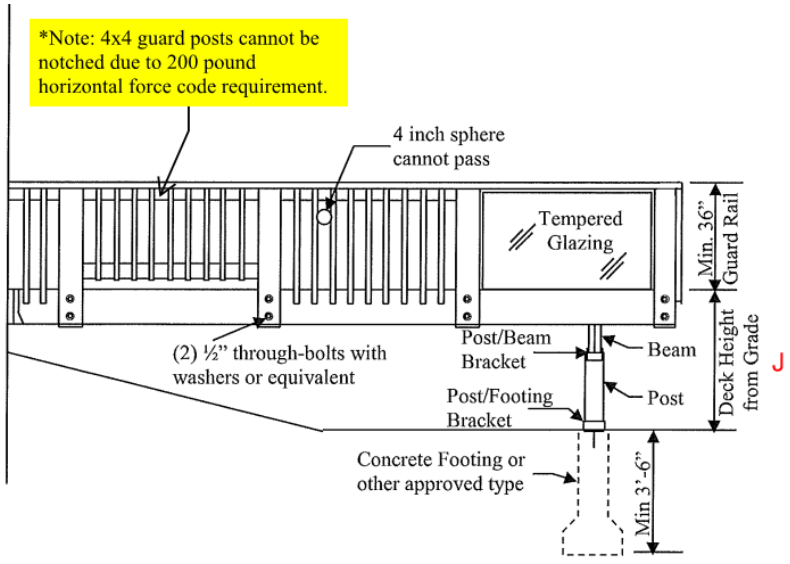
(I) Decking Material (Cedar, treated, composite, etc.) _____

(J) Deck Height _____



(Provide all lumber sizes and dimensions shown above)

Sample Floor Plan



Sample Elevation

(Various guard systems shown, other systems can be used that meet code)