RESIDENTIAL DECKS

The North Carolina State Residential Code (NCRC) requires a building permit for all decks regardless of the size of the deck or the location of the deck on the lot. The NCRC Appendix M provides a comprehensive list of construction requirements and construction details. Also refer to the Accumulative Changes (search “deck”) for the most up to date code changes.

APPLYING FOR A PERMIT:

You will need all of the following documents:

- **Completed Residential Application for Permit**
- **Two (2) Plot plans** (must show main dwelling outline, decks, porches, easements, buffers, etc. Include the distances to the property lines at the closest point). Please see a Sample Plot Plan on our website.
- **Two (2) sets of construction plans** drawn to scale (¼” = 1’ recommended). Include the following:
  1. Plan view (top view) is required
     - Name and address of person designing the deck (owner or contractor)
     - Outside dimensions of the proposed deck
     - Footing size (thickness, width, depth) and location for each footing
     - Girder size, type material, and location of each utilized
     - Floor joist size, type material, on-center spacing and direction of span
     - Dimensions between supports of all structural members
     - Attachment to the dwelling or note that deck is freestanding
     - Show cantilevers and length of cantilever in inches per table R502.3.3(1)
     - Treated floor decking per Appendix M Section AM109 (ex: 5/4x6, or 2x6 S4S) or other used
  2. Elevation drawings are optional (side and end views)
     - Provide elevation drawings and construction sections as necessary for clarification
     - Bracing is required for decks when the deck is more than 4’ above grade
     - Bracing in each direction is required for all freestanding decks
     - Guardrails (36” in height) are required when the deck is more than 30” above grade
  3. Engineering (all conditions below require design by a NC licensed design professional)
     - Deck supported by a cantilever floor system (i.e. bay window, fireplace, second floor)
     - Point loads not supported directly to the foundation or footing
     - Spas and hot tubs supported by wood floor system of the deck

FEES:

Fees are per the Town of Cary’s current approved budget document. Please refer to the current Fee Schedule for fee information.

Note: A minimum of one electrical outlet is required within the perimeter of the deck and one electrical outlet is required to be accessible at grade level while standing on the ground (two outlets total). Show the location of existing outlets and the proposed outlets on the plan to make clear if an electrical permit will be required.

INSPECTIONS:

1. **Footing Inspection:** For new footings: when footings are excavated but before the concrete is placed. For existing footings: uncover so the inspector can verify the length, width and depth at the bottom of the footing to ensure the existing footings are adequate in size to support the imposed load.
2. **Under-floor inspection:** Required when floor joists are closer that 48” to the ground and prior to installation of the decking.
3. **Electrical Inspection:** When the electrical work is complete but before any work is covered.
4. **Final Inspection:** When all work (including electrical) has been completed, inspected and approved.
SAMPLE DECK PLAN

This is an example of a deck plan that would be acceptable to submit with your application. The plan must be drawn to scale in "plan view" which is an overhead or bird's eye view. The following structural information must be provided on this drawing. Footing size and location, girder size and location and the floor joist size, spacing and direction of span. If the deck is being supported to another deck then the girders and footing information for the existing deck must be included as well. Include the overall dimensions of the deck and the dimensions between supports. Also include the designer's name and address and the drawing scale used. This sample plan is inclusive of all the necessary information. Using 1/4" graph paper is recommended for ease.

Deck attached to dwelling per Appendix M, Section AM104.1 with bolts and nails

**COMMON CONSTRUCTION DETAILS**

(Optional) CANTILEVER - limited to 2 x 8 @ 12" o.c. or 2 x 10's @ 16" o.c. or larger joists per Table R502.3.3(1)

- Joist
- Post
- Grade
- Footing
- Optional Cantilever
- Band
- "Dropped" Girder
- Solid blocking required over the girder
- Optional construction: Bolt girder to post using (2) 5/8" through-bolts (maintain required edge distance of 2" from the top and bottom of the girder)

SEE ATTACHED NCRC APPENDIX M FOR ADDITIONAL DETAILS TO ASSIST YOU IN THE CONSTRUCTION OF YOUR DECK

- Electrical Outlet
- Exterior Wall
- Foundation Drain Pipe
- Galvanized Flashing
- Decking Boards
- Optional Construction: Bolt girder to post using (2) 5/8" through-bolts (maintain required edge distance of 2" from the top and bottom of the girder)