NC Department of Insurance Office of the State Fire Marshal - Engineering Division 1202 Mail Service Center, Raleigh, NC 27699-1202 919-647-0000

Guidance Paper: Residential Plan Review Checklist

Code: 2018 NC Administrative Code and Policies **Section:** N.C. Session Law 2019-174

Date: 9/17/2019 **Revised:** 11/18/2019

Section: 106.2 of the NC Administrative Code and Policies

The purpose of any residential plan review service should be to limit the number of code defects that are built incorrectly in the field that tie up department resources and impact permit holders with significant repair cost and project delays. The following are guidelines to be used when a jurisdiction chooses to provide residential plan review services which are not mandated by the code for One- and Two-family dwellings.

Maximum required drawing submittal information for building only:

Drawings to scale (minimum 1/8") on minimum size 11"x17" sheets indicating the building designer or responsible party to include name, phone number and address. Plans must be legible (minimum font size of 10). No plans are required for electrical, mechanical or plumbing sheets for review. The following plans are required:

1. Plot Plan

- Location of the building on the site, as well as required setbacks, easements, property lines
- Any floodplain requirements if the property is located within a floodplain

2. Footing / Foundation Plans

- Minimum frost depth
- For slab-on-grade construction a description of the slab / haunch details and dimensions
- For basement and crawlspace construction a description of footing material and dimensions, as well as foundation wall materials, dimensions and maximum depth of unbalanced fill being supported, and dimensions of any internal pier footings

3. Floor and Elevation Plans

• Plans showing the rooms identified and dimensions, walk up attic (if applicable) and square footage, show front, sides and rear elevations of dwelling indicating heights and dimensions

4. Structural Plans

• <u>Floors:</u> Live loads, size and type of joist (solid sawn or engineered), layout of the span and spacing of joists (I-joists products must have manufacturer's layout), minimum required wood grade of joists, span / material / dimensions of intermediate girders, anchorage requirements (anchor bolts / straps – number, spacing, size, etc.), minimum required grade and type of floor sheathing, provide layout sheet if floor trusses are used

The guidance and opinions contained herein are not legal advice and may not necessarily reflect the most current statutory or code language.

- <u>Walls:</u> Size and spacing of wood studs, minimum required wood grade of studs, size and span of wood headers or/and engineering products (LVL, etc.), type of lateral bracing support and locations to counteract horizontal or overturning forces (structural sheathing, let-in braces, etc.) including the type of material, size and length required, show supporting studs for load bearing beams and load bearing points including solid blocking notation, any knee walls shown should have a notation whether they are bearing or non-load bearing
- **<u>Roofs:</u>** Live loads, size of members, type of members (solid sawn, engineered, etc.), spacing, minimum required wood grade of members, means of anchorage to wall, minimum required grade and type of roof sheathing

Not required to be submitted for building review:

1. Individual spec sheets on pre-engineered wood trusses. These will be handled in the field.

Additional process requirements:

- 1. Every effort should be used to process a residential review in a timely manner to include the use of "approved as noted". Small items in which a department can note or marked up on the plans and issue the permit should be allowed.
- 2. Minor revisions to approved plans that don't impact the permit information such as modification to the heated or unheated square footages should be handled by the field inspector.
- 3. Plans should be stamped by the department with wording similar to:

APPROVED

Limited building only review Permit holder responsible for full compliance with the code

References:

N.C. Session Law 2019-174. Section 10. "To promote uniformity in plan review and interpretation of the North Carolina State Building Code among those cities and counties that require review of building plans for structures subject to regulation under North Carolina Residential Code for One- and Two-Family Dwellings, the North Carolina Department of Insurance shall issue a guidance paper by October 1, 2019."

Keywords:

House plans